XR-C8100/C8100R

SERVICE MANUAL

Ver 1.1 2001. 08

AEP Model
UK Model
XR-C8100R
E Model
XR-C8100

Photo : XR-C8100R

Model Name Using Similar Mechanism	XR-C7200/C7200W
Tape Transport Mechanism Type	MG-25D-136

SPECIFICATIONS

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.08 % (WRMS)
Frequency response	30 - 20,000 Hz (C8100) 10 - 20,000 Hz (C8100R)

Signal-to-noise ratio

Cassette type	Dolby B NR	Dolby NR off
TYPE II, III, IV	67 dB	61 dB
TYPE I	64 dB	58 dB

Tuner section

FM

Tuning range	C8100: FM tuning interval: 50 kHz / 200 kHz switchable 87.5 - 108.0 MHz (at 50 kHz step) 87.5 - 107.9 MHz (at 200 kHz step) C8100R: 87.5 - 108.0 MHz
Aerial terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	9 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	0.7% (stereo), 0.4% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 - 15,000 Hz
Capture ratio	2 dB

AM (C8100)

Tuning range	AM tuning interval: 9 kHz / 10 kHz switchable 531 - 1,602 kHz (at 9 kHz step) 530 - 1,710 kHz (at 10 kHz step)
Aerial terminal	External antenna connector
Intermediate frequency	10.71 MHz / 450 kHz
Sensitivity	30 µV

MW/LW (C8100R)

Tuning range	MW: 531 - 1,602 kHz LW: 153 - 281 kHz
Aerial terminal	External antenna connector
Intermediate frequency	10.71 MHz / 450 kHz
Sensitivity	MW: 30 µV LW: 50 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 - 8 ohms
Maximum power output	45 W × 4 (at 4 ohms)

– Continued on next page –

FM/AM CASSETTE CAR STEREO
XR-C8100
FM/MW/LW CASSETTE CAR STEREO
XR-C8100R

9-925-904-12
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Sony Corporation
e Vehicle Company
Shinagawa Tec Service Manual Production Group

SONY®

General

Outputs	Line outputs (3) Power antenna relay control lead Power amplifier control lead Telephone ATT control lead Illumination control lead (C8100)
Tone controls	Bass ± 10 dB at 100 Hz Treble ± 10 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 180 mm (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 160 mm (w/h/d)
Mass	Approx. 1.5 kg
Supplied accessories	Rotary commander RM-X4S (1) Wireless remote RM-X47 (1) (C8100) Parts for installation and connections (1 set) Front panel case (1)

Design and specifications are subject to change without notice.

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Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

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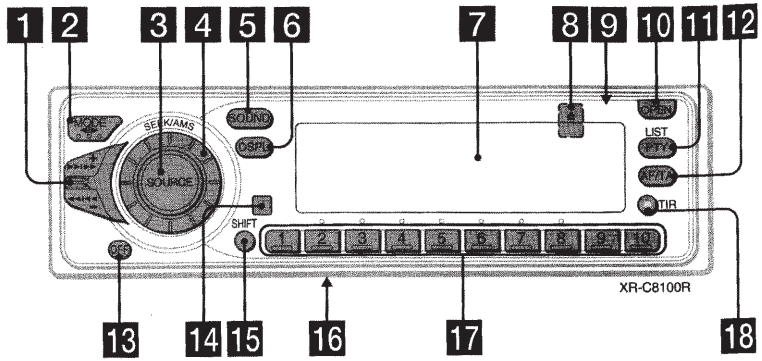
Location of controls



Refer to the pages for details.

1 **SEEK/AMS (seek/Automatic Music Sensor/manual search) control 9, 11, 13, 16, 17, 22, 23, 25, 28**

2 **MODE (◄II►)button**
During tuner reception:
BAND select 10, 11

During tape reception:
Transport direction change 8, 9

During CD or MD playback:
CD/MD Unit select 21, 23, 24, 27

3 **SOURCE (TAPE/TUNER/CD/MD) button 8, 10, 11, 21, 23, 27**

4 **Dial (volume/subwoofer volume/bass/treble/left-right/rear-front control) 7, 26**

5 **SOUND button 20**

6 **DSPL (display mode change) button 11, 12, 21, 22, 26, 27**

7 **Display window**

8 **⏏ (eject) button (located on the front side of the unit behind by the front panel) 8**

9 **Reset button (located on the front side of the unit behind by the front panel) 6**

10 **OPEN button 6, 8**

11 **PTY/LIST button**
Disc Memo **26, 27**
List-up **27**
RDS Programme **17**

12 **AF/TA button 13, 14, 15**

13 **OFF button 6, 8**

14 **Receptor for the optional wireless remote**

15 **SHIFT button**
PLAY MODE **9, 10, 11, 13, 15, 22, 23, 24, 25, 28**
REP **10, 23**
SET UP **7, 18, 20, 21, 22**
SHUF **23**

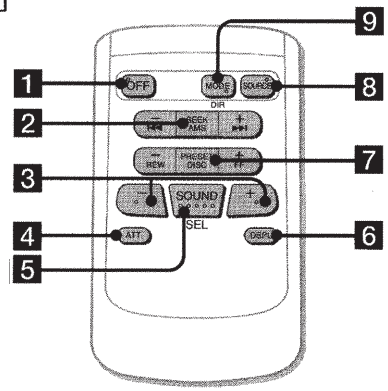
16 **POWER SELECT switch (located on the bottom of the unit)**
See "POWER SELECT Switch" in the Installation/Connections manual.

17 **During radio reception:**
Number buttons 11

During CD/MD playback:
Direct disc selection buttons 22

18 **TIR button 15, 16**

Optional wireless remote (RM-X47)



The buttons of the wireless remote work the same functions as those on this unit.

1 **OFF button**

2 **SEEK/AMS button**

3 **⊖ ⊕ buttons**

4 **ATT button**

5 **SOUND/SEL button**

6 **DSPL button**

7 **PRESET/DISC button**
You cannot do manual search and manual tuning with the remote.

8 **SOURCE button**

9 **MODE/DIR button**
(MODE) controls the same function on this unit.

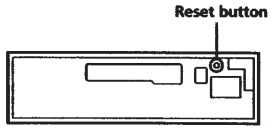
When the POWER SELECT switch is set to the ⓔ position, the unit cannot be operated with the wireless remote unless (SOURCE) on the unit is pressed or a cassette is inserted to activate the unit first.

This section extracted from XR-C8100R's instruction manual.

Getting Started

Resetting the unit

Before operating the unit for the first time or after replacing the car battery, you must reset the unit.
Press the reset button with a pointed object, such as a ballpoint pen.



Note
Pressing the reset button will erase the clock and some memorised functions.

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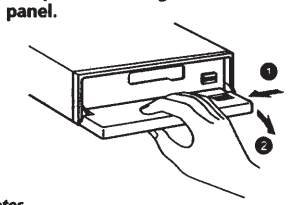
Detaching the front panel

You can detach the front panel of this unit to prevent the unit from being stolen.

1 **Press (OFF).**

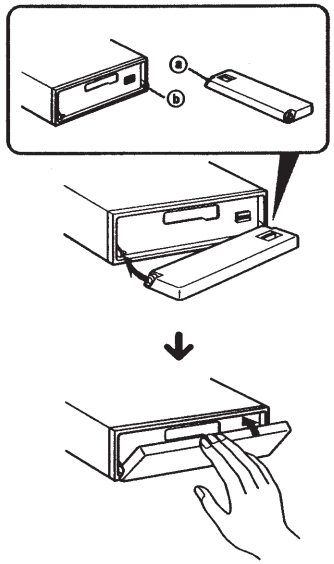
2 **Press (OPEN) to open up the front panel, then slide the front panel to the left side, and pull out the right side of the front panel.**



Notes
- *Do not put anything on the inner surface of the front panel.*
- *Be sure not to drop the panel when detaching it from the unit.*
- *If you detach the panel while the unit is still on, the power will turn off automatically to prevent the speakers from being damaged.*
- *When you carry the front panel with you, put it in the supplied front panel case.*

Attaching the front panel

Plase the hole ⓐ in the front panel onto the spidle ⓑ on the unit as illustrated, then push the left side in.



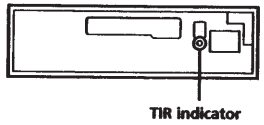
Notes
- *Be sure not to attach the front panel upside down.*
- *Do not press the front panel hard against the unit when attaching it. Press it lightly against the unit.*
- *Do not press hard or put excessive pressure on the display windows of the front panel.*
- *Do not expose the front panel to direct sunlight, heat sources such as hot air ducts, and do not leave it in a humid place. Never leave it on the dashboard of a car parked in direct sunlight where there may be a considerable rise in temperature.*

Caution alarm

If you turn the ignition key switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds (only when the POWER SELECT switch on the bottom of the unit is set to the Ⓐ position).

TIR indicator

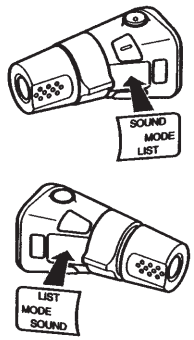
If you pull out the ignition key while the TIR function is on, the TIR indicator flashes a few times. (only when the POWER SELECT switch on the bottom of the unit is set to the Ⓐ position).



For more information on the TIR function, refer to "Recording the traffic announcements" (page 16).

Preparing the rotary commander

When you mount the rotary commander, attach the label in the illustration below.

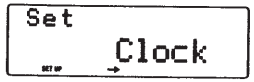


Setting the clock

The clock uses a 24-hour digital indication.

Example: Set the clock to 10:08

1 **Press (SHIFT), then press (3) (SET UP).**



❶ Press (5) (→).

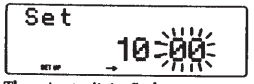
The hour digit flashes.

❷ Set the hour.

to go backward

to go forward

❸ Press (5) (→).

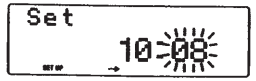


The minute digits flash.

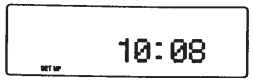
❹ Set the minute.

to go backward

to go forward



2 **Press (SHIFT).**



The clock starts.

continue to next page →

EN

Getting Started

3 Press (SHIFT).
After the mode setting is complete, the display goes back to normal playback mode.

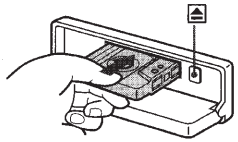
Note
If the POWER SELECT switch on the bottom of the unit is set to the ⏻ position, turn the power on first, then set the clock.

EN

Cassette Player

Listening to a tape

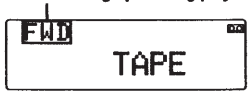
1 Press (OPEN) and insert a cassette.



2 **Close the front panel.**
Playback starts automatically.

If a cassette is already inserted, press (SOURCE) repeatedly until "FWD" or "REV" appears to start playback.

The side facing up is being playback.



The side facing down is being playback.

Tips
- *To change the tape transport direction, press (MODE) (◀▮▶).*
- *"Metal" appears in the display when you insert a metal or CrO_2 tape (Auto Metal function).*

To	Press
Stop playback	(OFF)
Eject the cassette	(OPEN) then ⏏

Fast-winding the tape

During playback, push the SEEK/AMS control up or down and hold.

Fast-forward

Rewind

To start playback during fast-forwarding or rewinding, press (MODE).

Locating a specific track — Automatic Music Sensor (AMS)

You can skip up to nine tracks at one time.

During playback, push the SEEK/AMS control up or down momentarily.

To locate succeeding tracks

To locate preceding tracks

Note
The AMS function may not work when:
- *— the blancks between tracks are shorter than four seconds*
- *— there is noise between tracks*
- *— there are long sections of low volume or quiet sections.*

Changing the display item

Each time you press (DSPL), the item changes as follows:

Tape playback → Clock → Frequency*1 → MOTION DISPLAY*2 → Tape playback

*1 *While the AFITA function is activated.*
*2 *All the items above are scrolled in the display one by one in order.*

Playing a tape in various modes

You can play the tape in various modes:
- Intro (Intro Scan) lets you play the first 10 seconds of all the tracks.
- NR (Dolby NR) lets you select the Dolby* NR B system.
- B. Skip (Blank Skip) skips blanks longer than eight seconds.
- ATA (Automatic Tuner Activation) turns on the tuner automatically while fast-winding the tape.
- Repeat (Repeat Play) repeats the current track.

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Searching for the desired track — Intro scan

1 Press (SHIFT).
Every time you press (SHIFT), only the items you can select light up.

2 **Press ④ (PLAY MODE) repeatedly until "Intro" appears.**
Each time you press ④ (PLAY MODE), the item changes as follows:
Intro → NR → B. Skip → ATA

3 **Press ⑤ (→) to select "Intro on."**

Intro Scan starts.

4 Press (SHIFT).

To go back to normal playback mode, select "Intro off" in step 3 above.

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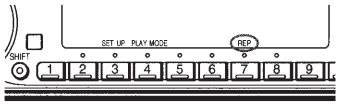
Playing tracks repeatedly
— Repeat Play

1 During playback, press (SHIFT).

2 Press (7) (REP) repeatedly until "Repeat" appears.



Repeat Play starts.

3 Press (SHIFT).

To go back to normal playback mode, select "Repeat off" in step 2 above.

EN

Radio

Memorising stations automatically
— Best Tuning Memory (BTM)

The unit selects the stations with the strongest signals and memorises them in the order of their frequencies. You can store up to 10 stations on each band (FM1, FM2, MW and LW).

Caution
When tuning in stations while driving, use Best Tuning Memory to prevent accidents.

1 Press (SOURCE) repeatedly to select the tuner.
Each time you press (SOURCE), the source changes as follows:
TAPE ↔ TUNER

2 Press (MODE) repeatedly to select the band.
Each time you press (MODE), the band changes as follows:

→ FM1 → FM2 → MW → LW →

3 Press (SHIFT), then press (4) (PLAY MODE) repeatedly until "B.T.M" appears.

4 Press (5) (→).
The unit stores stations in the order of their frequencies on the number buttons.
A beep sound and the setting is stored.

5 Press (SHIFT).

Notes
- *The unit does not store stations with weak signals. If only a few stations are received, some number buttons will retain heir former setting.*
- *When a number is indicated in the display, the unit starts storing stations from the one currently displayed.*

Memorising only the desired stations

You can store up to 10 stations on each band (20 for FM1 and FM2, 10 for each MW and LW) in the order of your choice.

1 Press (SOURCE) repeatedly to select the tuner.

2 Press (MODE) repeatedly to select the band (FM1, FM2, MW or LW).

3 Push the SEEK/AMS control up or down to tune in the station you want to store on the number button.

4 Press and hold the desired number button (1) to (10) until "MEM" appears.
The number button indication appears in the display.

Note
If you try to store another station on the same number button, the previously stored station will be erased.

Receiving the memorised stations

1 Press (SOURCE) repeatedly to select the tuner.

2 Press (MODE) repeatedly to select the band (FM1, FM2, MW or LW).

3 Press the number button (1) to (10) momentarily where the desired station is stored.

If you cannot tune in a preset station

Push the SEEK/AMS control up or down momentarily to search for the station (automatic tuning).
Scanning stops when the unit receives a station. Push the SEEK/AMS control up or down repeatedly until the desired station is received.

Note
If the automatic tuning stops too frequently, press (SHIFT), then press (4) (PLAY MODE) repeatedly until "Local" (local seek mode) is displayed. Then press (5) (→) to select "Local on." Press (SHIFT). Only the stations with relatively strong signals will be tuned in.

Tip
If you know the frequency of the station you want to listen to push the SEEK/AMS control up or down and hold until the desired frequency appears (manual tuning).

If FM stereo reception is poor
— Monaural Mode

1 Press (SHIFT), then press (4) (PLAY MODE) repeatedly until "Mono" appears.

2 Press (5) (→) repeatedly until "Mono on" appears.
The sound improves, but becomes monaural ("ST" disappears).

3 Press (SHIFT).

To go back to normal mode, select "Mono off" in step 2 above.

Changing the displayed items
Each time you press (DSPL), the item changes as follows:

→ Frequency (Station Name)*1 → Clock →
MOTION DISPLAY*2 ←

*1 *When you tune in an FM station that transmits RDS data, the station name appears.*
*2 *All the itmes above are scrolled in the display one by one in order.*

EN

Cassette Player/Radio

RDS

Overview of the RDS function

Radio Data System (RDS) is a broadcasting service that allows FM stations to send additional digital information along with the regular radio programme signal. Your car stereo offers you a variety of services. Here are just a few: re-tuning the same programme automatically, listening to traffic announcements and locating a station by programme type.

Notes

- *Depending on the country or region, not all of the RDS functions are available.*
- *RDS may not work properly if the signal strength is weak or if the station you are tuned to is not transmitting RDS data.*

Displaying the station name

The name of the current station lights up in the display.

Select an FM station (page 10).
When you tune in an FM station that transmits RDS data, the station name appears in the display.

Note

The "" indication means that an RDS station is being received.*

Changing the displayed item

Each time you press (DSPL), the item changes as follows:

Station Name/Frequency → Clock → MOTION DISPLAY* → Station Name/Frequency

** All the itmes above are scrolled in the display one by one in order.*

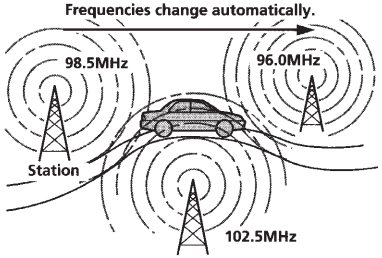
Note

"NO Name" appears if the received station does not transmit RDS data.

Re-tuning the same programme automatically

— Alternative Frequencies (AF)

The Alternative Frequencies (AF) function automatically selects and re-tunes the station with the strongest signal in a network. By using this function, you can continuously listen to the same programme during a long-distance drive without having to re-tune the station manually.



1 Select an FM station.

2 Press (AF/TA) repeatedly until "AF on" appears.
The unit starts searching for an alternative station with a stronger signal in the same network.

Note

When there is no alternative station in the area and you do not need to search for an alternative station, turn the AF function off by pressing (AF/TA) repeatedly until "AF TA off" appears.

Changing the displayed item

Each time you press (AF/TA), the item changes as follows:

AF on → TA on → AF TA on* → AF TA off → AF on

** Select this to turn on both the AF and TA functions.*

Notes

- *"NO AF" and the station name flash alternately, if the unit cannot find an alternative station in the network.*
- *If the station name starts flashing after selecting a station with the AF function on, this indicates that no alternative frequency is available. Push the SEEK/AMS control up or down while the station name is flashing (within eight seconds). The unit starts searching for another frequency with the same PI (Programme Identification) data ("PI seek" appears and no sound is heard). If the unit cannot find another frequency, "NO PI" appears, and the unit returns to the originally selected frequency.*

Listening to a regional programme

The "REG on" (regional on) function lets you stay tuned to a regional programme without being switched to another regional station. (Note that you must turn the AF function on.) The unit is factory preset to "REG on," but if you want to turn off the function, do the following.

1 Press (SHIFT), then press (4) (PLAY MODE) repeatedly until "REG" appears.

2 Press (5) (→) repeatedly until "REG off" appears.

3 Press (SHIFT).
Note that selecting "REG off" might cause the unit to switch to another regional station within the same network.

To go back to regional on, select "REG on" in step 2 above.

Note

This function does not work in the United Kingdom and in some other areas.

Local link function (United Kingdom only)

The Local Link function lets you select other local stations in the area, even though they are not stored on your number buttons.

1 Press a number button that has a local station stored on it.

2 Within five seconds, press the number button of the local station again.

3 Repeat this procedure until the desired local station is received.

Listening to traffic announcements

The Traffic Announcement (TA) and Traffic Programme (TP) data let you automatically tune in an FM station that is broadcasting traffic announcements even though you are listening to other programme sources.

Press (AF/TA) repeatedly until "TA on" or "AF TA on" appears.
The unit starts searching for traffic information stations. "TP" appears in the display when the unit finds a station broadcasting traffic announcements. When the traffic announcement starts, "TA" flashes. The flashing stops when the traffic announcement is over.

Tip
If the traffic announcement starts while you are listening to another programme source, the unit automatically switches to the announcement and goes back to the original source when the announcement is over.

Notes
- *"NO TP" flashes for five seconds if the received station does not broadcast traffic announcements. Then, the unit starts searching for a station that broadcasts traffic announcements.*
- *When "EON" appears with "TP" in the display, the current station makes use of broadcast traffic announcements by other stations in the same network.*

To cancel the current traffic announcement

Press (AF/TA) momentarily.
To cancel all traffic announcements, turn off the function by pressing (AF/TA), "AF TA off" appears.

Presetting the volume of traffic announcements

You can preset the volume level of the traffic announcements beforehand so you won't miss the announcement. When a traffic announcement starts, the volume will be automatically adjusted to the preset level.

1 Select the desired volume level.

2 Press (AF/TA) for two seconds.
"TA" appears and the setting is stored.

Receiving emergency announcements

If an emergency announcement comes in while you are listening to the radio, the programme will automatically switch to the announcement. If you are listening to a source other than the radio, the emergency announcements will be heard if you set AF or TA to on. The unit will then automatically switch to these announcements no matter what you are listening to at the time.

Presetting the RDS stations with the AF and TA data

When you preset RDS stations, the unit stores each station's data as well as its frequency, so you don't have to turn on the AF or TA function every time you tune in the preset station. You can select a different setting (AF, TA, or both) for individual preset station, or the same setting for all preset stations.

Presetting the same setting for all preset stations

1 Select an FM band (page 10).

2 Press (AF/TA) repeatedly to select either "AF on," "TA on" or "AF TA on" (for both AF and TA functions).
Note that selecting "AF TA off" stores not only RDS stations, but also non-RDS stations.

3 Press (SHIFT), then press (4) (PLAY MODE) repeatedly until "B.T.M" appears.

4 Press (5) (→) until "B.T.M" flashes.

5 Press (SHIFT).

Presetting different settings for each preset station

1 Select an FM band, and tune in the desired station.

2 Press (AF/TA) repeatedly to select either "AF on," "TA on" or "AF TA on" (for both AF and TA functions).

3 Press the desired number button and hold until "MEM" appears.
Repeat from step 1 for presetting other stations.

Tip
If you want to change the preset AF and/or TA setting after you tune in the preset station, you can do so by turning the AF or TA function on or off.

Recording the traffic announcements

—Traffic Information Replay (TIR)

You can listen to the latest traffic announcements by recording them. The unit automatically records and stores up to eight traffic announcements. If the recording exceeds four minutes, the recorded announcements are updated, so you can always hear the latest information.
The TIR function turns on the unit automatically and records the traffic announcements for up to two hours before and after a preset time.

Presetting the time and the station

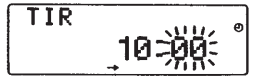
1 Press and hold (TIR) until "TIR" lights up in the display.

2 Press (5) (→) repeatedly until "TIR on" appears.

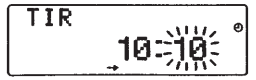
3 Press (TIR) repeatedly until the time indication appears.

❶ Set the hour by rotating the dial.

❷ Press (5) (→) until the minute digits flash.



❸ Set the minute by rotating the dial.



4 Press (TIR).

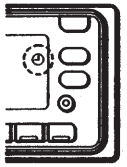
EN

EN

RDS

5 Select the desired station by pressing the preset number button or pushing the SEEK/AMS control up or down.

6 Press (TIR) for two seconds to return to the original display.
🕘 lights up.



The unit turns on automatically and stands by for traffic announcements for four hours (two hours before and after the preset time).
If the preset station does not broadcast the traffic announcement while searching, the unit starts searching for other traffic programme (TP) stations.

EN

To cancel the TIR function

Select "TIR off" in step 2 above.

Tips
- *While the unit is recording the traffic announcement, 🕘 and "TA" flash.*
- *If the unit still cannot find a TP station, it starts a new search every five minutes until it finds one.*
- *If you pull out the ignition key while the TIR function is on, "TIR on" and 🕘 flash a few times.*

Notes
- *The unit also stands by for traffic announcements for two hours after you turn off the engine, as long as the TIR function is on.*
- *If you have a power aerial, it automatically extends every time the unit searches for a traffic programme station.*
  If you have a manual aerial, make sure that the aerial is fully extended.
- *If you do not use your car for about ten days, the TIR function will turn off automatically to avoid battery wear, even if the TIR function is on.*

Playing back the recorded traffic announcements

When there are recorded traffic announcements you have not listened to yet, 🕘 flashes.

1 Press (TIR).
The latest traffic announcement is played back. To listen to the previous ones, press (TIR) or push the SEEK/AMS control up. To replay the announcements, push the SEEK/AMS control down.
"NO Data" appears if no traffic announcements were recorded.

2 Press (TIR) to go back to the original programme.

Locating a station by programme type

You can locate the station you want by selecting one of the programme types shown below.

Note
If you are in a country or region where EON data is not transmitted, you can use this function only for the stations you have tuned in once.

Programme types	Display
News	News
Current Affairs	Affairs
Information	Info
Sports	Sport
Education	Educate
Drama	Drama
Culture	Culture
Science	Science
Varied	Varied
Popular Music	Pop M
Rock Music	Rock M
Middle of the Road Music	M. o. R. M
Light Classical	Light M
Classical	Classics
Other Music Type	Other M
Weather	Weather
Finance	Finance
Children's programmes	Children
Social Affairs	Social A
Religion	Religion
Phone In	Phone In
Travel	Travel
Leisure	Leisure
Jazz Music	Jazz
Country Music	Country
National Music	Nation M
Oldies Music	Oldies
Folk Music	Folk M
Documentary	Document
Not specified	None

Note
You cannot use this function in some countries where no PTY (Programme Type selection) data is available.

1 Press (PTY/LIST) during FM reception until "PTY" appears.

The current programme type name appears if the station is transmitting the PTY data. "- - - - -" appears if the received station is not an RDS station, or if the RDS data has not been received.

2 Press (PTY/LIST) repeatedly until the desired programme type appears.
The programme types appear in the order shown in the above table. Note that you cannot select "None" (Not specified) for searching.

3 Push the SEEK/AMS control up or down.
The unit starts searching for a station broadcasting the selected programme type. When the unit finds the programme, the programme type appears again for five seconds.
"NO" and the programme type appear alternately for five seconds if the unit cannot find the programme type. It then returns to the previous station.

EN

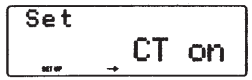
RDS

Setting the clock automatically

The CT (Clock Time) data from the RDS transmission sets the clock automatically.

1 Press (SHIFT), then press ③ (SET UP) repeatedly until "CT" appears.

2 Press ⑤ (→) repeatedly until "CT on" appears.
The clock is set.



EN

3 Press (SHIFT) to return to the normal display.

To cancel the CT function

Select "CT off" in step 2 above.

Notes

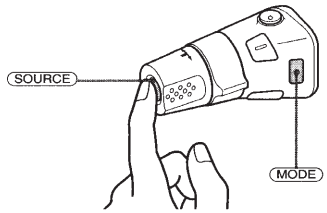
- *The CT function may not work even though an RDS station is being received.*
- *There might be a difference between the time set by the CT function and the actual time.*

Other Functions

Using the rotary commander

The rotary commander works by pressing buttons and/or rotating controls.
You can control an optional CD or MD unit with the rotary commander.

By pressing buttons (the SOURCE and MODE buttons)



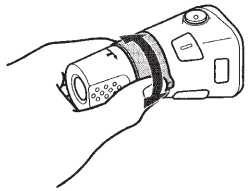
Each time you press (SOURCE), the source changes as follows:
TAPE → TUNER → CD → MD

Pressing (MODE) changes the operation in the following ways;

- **Tape transport direction**
- **Tuner : FM1 → FM2 → MW → LW**
- **CD unit : CD1 → CD2 → ...**
- **MD unit : MD1 → MD2 → ...**

Tip
When the POWER SELECT switch is set to position ❸, you can turn on this unit by pressing (SOURCE) on the rotary commander.

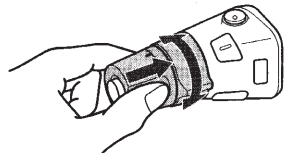
By rotating the control (the SEEK/AMS control)



Rotate the control momentarily and release it to:

- Locate the beginnings of the tracks on the tape. Rotate and hold the control, and release it to fast-wind the tape. To playback, rotate and hold the control again, and release it.
- Locate a specific track on a disc. Rotate and hold the control until you lacate the specific point in a track, then release it to start playback.
- Tune in stations automatically. Rotate and hold the control to tune in a specific station.

By pushing in and rotating the control (the PRESET/DISC control)

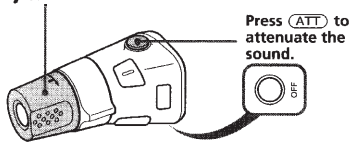


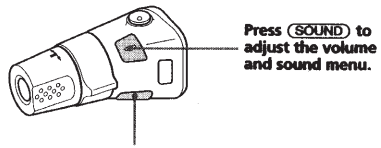
Push in and rotate the control to:

- Receive the stations memorised on the number buttons.
- Change the disc.

Other operations

Rotate the VOL control to adjust the volume.



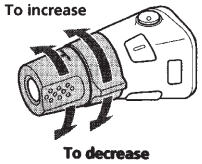


Press (LIST) to:

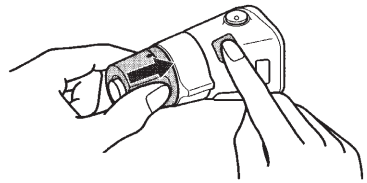
- **Display the memorised names.**
- **Display the programme type.**

Changing the operative direction

The operative direction of controls is factory-set as in the illustration below.



If you need to mount the rotary commander on the right side of the steering column, you can reverse the operative direction.



Press (SOUND) for two seconds while pushing the VOL control.

Tip
You can control the operative direction of controls with the unit (page 20).

EN

Adjusting the sound characteristics

You can adjust the bass, treble, balance and fader.
Each source can store the bass and treble levels respectively.

1 Select the item you want to adjust by pressing (SOUND) repeatedly.

VOL (volume) → SUB (subwoofer volume) → BAS (bass) → TRE (treble) → BAL (left-right) → FAD (front-rear)

2 Adjust the selected item by rotating the dial.
Adjust within three seconds after selecting the item. (After three seconds, the dial functions as the volume control.)

EN

Attenuating the sound

Press (ATT) on the rotary commander or wireless remote.
"ATT on" flashes momentarily.

To restore the previous volume level, press (ATT) again.

Tip
The unit decreases the volume automatically when a telephone call comes in (Telephone ATT function).

Changing the sound and display settings

You can set:
- Clock (page 7).
- CT (Clock Time) (page 18).
- D.Info (Dual Information) to display the clock and the play mode at the same time (ON) or to display the information alternately (OFF).
- Amber/Green to change the illumination colour to amber or green.
- Dimmer to change the brightness of the display.
  — Select "Auto" to dim the display only when you turn the lights on.
  — Select "on" to dim the display.
- Contrast to adjust the contrast if the indications in the display are not recognizable because of the unit's installed position.
- Voice guide function for vocalized comments.
- Beep to turn on or off the beeps.
- RM (Rotary Commander) to change the operative direction of the controls of the rotary commander.
  — Select "norm" to use the rotary commander as the factory-set position.
  — Select "rev" when you mount the rotary commander on the right side of the steering column.
- Loud (Loudness) to enjoy bass and treble even at low volume. The bass and treble will be reinforced.
- LPF (Low Pass Filter).
- A. Scrl (Auto Scroll) (page 22).

1 Press (SHIFT).

2 Press ③ (SET UP) repeatedly until the desired item appears.

Each time you press ③ (SET UP), the item changes as follows:

Clock → CT → D.Info* → Amber/Green → Dimmer → Contrast → Voice* → Beep → RM → Loud* → LPF* → A.Scrl*

** When the radio is off, or when there is no tape, CD, or MD being played, these items will not appears*

Note
The displayed item will differ depending on the source.

3 Press ⑤ (→) to select the desired setting (for example: on or off).
For the "Contrast" setting, pressing ⑤ (→) makes the contrast higher, and pressing ② (←) makes the contrast lower.

4 Press (SHIFT).
After the mode setting is complete, the display goes back to normal playback mode.

Adjusting the frequency of the subwoofer(s)

To match the characteristics of the connected subwoofer(s), you can cut out the unwanted high and middle frequency signals entering the subwoofer(s). By setting the cut-off frequency, the subwoofer(s) will output only low frequency signals so you can get a clearer sound image.

1 Press (SOURCE) to select a source (radio, tape, CD, or MD).

2 Press (SHIFT), then press ③ (SET UP) repeatedly until "LPF" appears.

3 Press ⑤ (→) or ② (←) repeatedly to select desired setting.

Each time you press ⑤ (→) or ② (←), the cut-off frequency in the display changes as follows:

LPF 120 Hz ↔ LPF 80 Hz ↔ LPF off

4 Press (SHIFT).
When the frequency setting is complete, the display goes back to the normal playback mode.

With Optional Equipment

CD/MD Unit

You can control up to 7 CD and MD units with this unit.
If you connect an optional CD unit with the CD TEXT function, the CD TEXT information will appear in the display when you play back a CD TEXT disc.

Playing a CD or MD

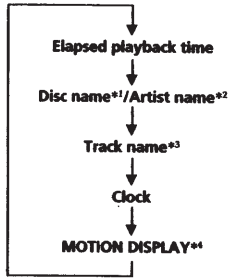
1 Press (SOURCE) repeatedly to select the CD or MD.

2 Press (MODE) until the desired unit appears.
CD/MD playback starts.

When a CD/MD unit is connected, all the tracks play from the beginning.

Changing the displayed item

Each time you press (DSPL) during CD, CD TEXT or MD playback, the item changes as follows:



**1 If you have not labeled the disc or there is no disc name prerecorded on the MD, "NO D.Name" appears in the display.*
**2 If you play a CD TEXT disc, the artist name appears in the display after the disc name. (Only for CD TEXT discs with the artist name.)*
**3 If the track name of a CD TEXT disc or MD is not prerecorded, "NO T.Name" appears in the display.*
**4 All the items above are scrolled in the display one by one in order.*

EN

Other Functions/CD/MD Unit

You can label CD and CD TEXT discs with a personalized name using the disc memo function, refer to "Labeling a CD" (page 26). However, if you use personalized labels, they will always take priority over the original CD TEXT information when such information is displayed.

Tip
If the name of the MD or CD TEXT disc is too long, you can scroll it across the display by pressing (SHIFT), then ② (←).

Automatically scrolling a disc name — Auto Scroll

If the disc name / artist name or track name on a CD TEXT disc or MD exceeds 10 characters and the Auto Scroll function is on, automatically scrolls on the display as follows:
- *The disc name appears when the disc has changed (if the disc name is selected).*
- *The track name appears when the track has changed (if the track name is selected).*

If you press (DSPL) to change the display item, the disc or track name of the MD or CD TEXT disc is scrolled automatically whether you set the function on or off.

1 During playback, press (SHIFT).

2 Press ③ (SET UP) repeatedly until "A.Scrl" appears.

3 Press ⑤ (→) to select "A.Scrl on."

4 Press (SHIFT)

To cancel Auto Scroll, select "A.Scrl off" in step 2 above.

Note
For some CD TEXT discs with extremely many characters, the following cases may happen:
— Some of the characters are not displayed
— Auto Scroll does not work.

Locating a specific track — Automatic Music Sensor (AMS)

During playback, push the SEEK/AMS control up or down once for each track you want to skip.

To locate succeeding tracks

To locate preceding tracks

Locating a specific point in a track — Manual Search

During playback, push the SEEK/AMS control up or down and hold. Release when you have found the desired point.

To search forward

To search backward

Locating a disc by disc number — Direct Disc Selection

Press the number button that corresponds with the desired disc number.
The desired disc in the current changer begins playback.

Scanning the tracks — Intro Scan

You can play the first 10 seconds of all the tracks on the current disc.

1 During playback, press (SHIFT), then press ④ (PLAY MODE) repeatedly until "Intro" appears.

2 Press ⑤ (→) to select "Intro on."
Intro Scan starts.

3 Press (SHIFT).

To go back to normal playback mode, select "Intro off" in step 2 above.

Playing tracks repeatedly — Repeat Play

You can select:
- Repeat 1 to repeat a track.
- Repeat 2 to repeat a disc.

1 During playback, press (SHIFT).

2 Press ⑦ (REP) repeatedly until the desired setting appears.

Repeat 1 → Repeat 2 → Repeat off

Repeat Play starts.

3 Press (SHIFT).

To go back to normal playback mode, select "Repeat off" in step 2 above.

Playing tracks in random order — Shuffle Play

You can select:
- Shuf 1 to play the tracks on the current disc in random order.
- Shuf All to play all the tracks in random order.

1 During playback, press (SHIFT).

2 Press ⑧ (SHUF) repeatedly until the desired setting appears.

Shuf 1 → Shuf All → Shuf off

Shuffle Play starts.

3 Press (SHIFT).

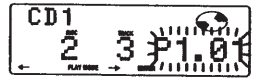
To go back to normal playback mode, select "Shuf off" in step 2 above.

Creating a programme — Programme Memory (CD/MD unit with the programme memory function)

You can play tracks in the order you want by making your own programme. You can make two programmes: Programme 1 and Programme 2. You can select up to 12 tracks for each programme. You can store the programmes in memory.

1 Press (SHIFT), then press ④ (PLAY MODE) for two seconds.

Programme edit mode



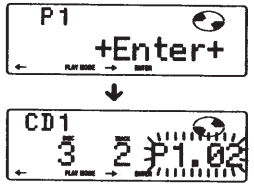
"P 1" shows Programme 1 is selected.

If you have labelled the disc, the bank edit mode appears. Press ④ (PLAY MODE) to display "P 1" above.

To select Programme 2, press ⑤ (→) repeatedly until "P 2" appears.

2 Select the track you want.
- **❶ Press (SOURCE) repeatedly to select CD or MD.**
- **❷ Press (MODE) repeatedly to select the unit.**
- **❸ Press (SHIFT), then press the number button to select the disc.**
- **❹ Press (SHIFT).**
- **❺ Push the SEEK/AMS control up or down to select the track.**

3 Press ⑥ (ENTER) momentarily.



4 To continue entering tracks, repeat steps 2 and 3.

5 When you finish entering tracks, press ④ (PLAY MODE) for two seconds.

6 Press (SHIFT).

Notes

- ***"**Wait**" appears in the display while the unit is reading the data, or when a disc has not been put into the unit.***
- ***"*Mem Full*" appears in the display when you try to enter more than 12 tracks into a programme.***

Playing the stored programme

Changing the disc order in the unit will not affect programme memory play.

You can select:
- PGM 1 to play Programme 1.
- PGM 2 to play Programme 2.
- PGM 1+2 to play Programmes 1 and 2.

1 Press (SHIFT).

2 Press ④ (PLAY MODE) repeatedly until "PGM" appears.

3 Press ⑤ (→) repeatedly until the desired programme appears.

Programme 1 playback

Programme 2 playback

Programmes 1 and 2 playback

Normal playback

Programme Play starts.

4 Press (SHIFT).

To go back to normal playback mode, select "PGM off" in step 3 above.

Notes

- ***If you press a number button during programme memory play, programme memory play is interrupted, and playback of the selected disc starts.***
- ***"NO Data" appears in the display if no track is stored in the programme.***
- ***If a track stored into the programme memory is not in the disc magazine, the track will be skipped.***
- ***When the disc magazine contains no tracks stored into the programme memory, or when the programme information has not been loaded yet, "Not ready" appears.***

Erasing an entire programme

1 Press (SHIFT), then press ④ (PLAY MODE) for two seconds.

"P 1" shows Programme 1 is selected.

If you have labelled the disc, the bank edit mode appears. Press ④ (PLAY MODE) to display "P 1" above.

2 Press ② (←) repeatedly until "DEL" appears.

To erase Programme 2, press ⑤ (→) repeatedly until "PGM 2" appears.

3 Press ⑥ (ENTER) for two seconds.

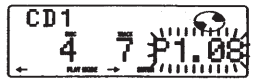
The entire programme is erased.

4 When you finish erasing programmes, press ④ (PLAY MODE) for two seconds.

5 Press (SHIFT).

Adding tracks to a programme

1 Press (SHIFT), then press ④ (PLAY MODE) for two seconds.



"P 1" shows Programme 1 is selected.

If you have labelled the disc, the bank edit mode appears. Press ④ (PLAY MODE) to display "P 1" above.

To select Programme 2, press ⑤ (→) repeatedly until "P 2" appears.

2 Press ② (←) or ⑤ (→) to select the track slot number where you want to insert a track.

Track slot number

3 Push the SEEK/AMS control up or down to select the track you want to insert.

4 Press ⑥ (ENTER) momentarily to enter the track.
The current track in that slot number and the succeeding tracks shift down.
To continue inserting tracks, repeat steps 2 through 4.

Note

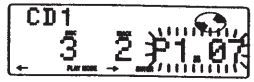
Once all 12 slots have been filled, "*Mem Full*" appears in the display, and you cannot insert tracks.

5 When you finish inserting tracks, press ④ (PLAY MODE) for two seconds.

6 Press (SHIFT).

Erasing tracks in a programme

1 Press (SHIFT), then press ④ (PLAY MODE) for two seconds.



"P 1" shows Programme 1 is selected.

If you have labelled the disc, the bank edit mode appears. Press ④ (PLAY MODE) to display "P 1" above.

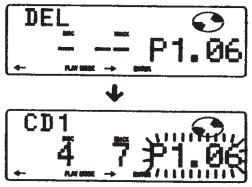
To select Programme 2, press ⑤ (→) repeatedly until "P 2" appears.

2 Press ② (←) or ⑤ (→) to select the track you want to erase.

Track slot number

The track currently registered in slot 6 of Programme 1.

3 Press ⑥ (ENTER) for two seconds.
When you erase a track from a slot number, the succeeding tracks shift up to fill the gap.



4 To continue erasing tracks, repeat steps 2 and 3.

5 When you finish erasing tracks, press ④ (PLAY MODE) for two seconds.

6 Press (SHIFT).

Labeling a CD — Disc Memo
(CD unit with the custom file function)

You can label each disc with a personalized name. You can enter up to eight characters for a disc. If you label a CD, you can locate the disc by name (page 27) and select the specific tracks for playback (page 28).

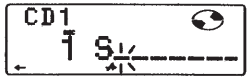
1 Play the CD and press (PTY/LIST) for two seconds.

2 Enter the characters.

❶ Rotate the dial clockwise to select the desired characters.
(A → B → C → ··· Z → 0 → 1 → 2 → ··· 9 → + → − → * → / → \ → > → < → . → _)

If you rotate the dial counterclockwise, the characters appear in the reverse order.
If you want to put a blank space between characters, select "_" (under-bar).

❷ Press (5) (→) after locating the desired character.
The flashing cursor moves to the next space.



If you press (2) (←), the flashing cursor moves to the left.

❸ Repeat steps ❶ and ❷ to enter the entire name.

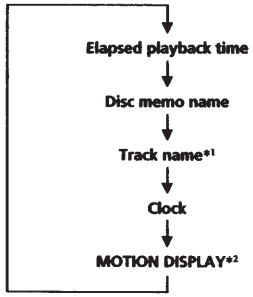
3 To return to normal CD playback mode, press (PTY/LIST) for two seconds.

Tip
To erase/correct a name enter "_" (under-bar) for each character.

Displaying the disc memo name

Press (DSPL) during CD or CD TEXT disc playback.

Each time you press (DSPL) during CD or CD TEXT disc playback, the item changes as follows:



*1 *If you connect an optional CD unit with the CD TEXT function, the CD TEXT information will appear in the display when you playback a CD TEXT disc.*
*2 *All the items above are scrolled in the display one by one in order.*

Erasing the disc memo

1 Press (SOURCE) repeatedly to select CD.

2 Press (MODE) repeatedly to select the CD unit.

3 Press (PTY/LIST) for two seconds.

4 Press (DSPL) for two seconds.

5 Rotate the dial to select the name you want to erase.

6 Press (6) (ENTER) for two seconds.
The name is erased.
Repeat steps 5 and 6 if you want to erase other names.

7 Press (PTY/LIST) for two seconds.
The unit returns to normal CD playback mode.

Note
When the personalized label is erased, the original CD TEXT information will appear in the display.

Locating a disc by name
— List-up (CD unit with the custom file function or MD unit)

You can use this function for discs that have been assigned a custom name. For more information on disc names, refer to "Labeling a CD" (page 26).

1 Press (PTY/LIST) momentarily.
The name assigned to the current disc appears in the display.

When you assign a disc memo label to a CD TEXT disc, it takes priority over the original CD TEXT information.

2 Press (PTY/LIST) repeatedly until you find the desired disc.

3 Press (6) (ENTER) to play back the disc.

Notes
- *After a disc name has been displayed for five seconds, the display goes back to normal playback mode. To turn off the display, press (DSPL).*
- *The track names are not displayed during MD or CD TEXT disc playback.*
- *If there are no discs in the magazine, "NO Disc" appears in the display.*
- *If a disc has not been assigned a custom file, "********" appears in the display.*
- *If the disc information has not been read by the unit, "?" appears in the display. To load the disc, first press the number button, then choose the disc that has not been loaded.*
- *The information appears only in upper case. There are also some letters which cannot be displayed (during MD or CD TEXT disc playback).*

EN

EN

CD/MD Unit

Selecting specific tracks for playback

— Bank

(CD unit with the custom file function)

If you label the disc, you can set the unit to skip tracks and play only the tracks you want.

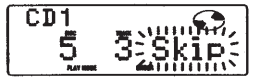
1 Start playing the disc and press (SHIFT). Then press ④ (PLAY MODE) for two seconds.

Bank edit mode.

Note

If you have not labeled the disc, the bank edit mode does not appear and the programme edit mode appears. To go back to normal playback mode, press ④ (PLAY MODE) for two seconds.

2 Push the SEEK/AMS control up or down to select the track number you want to skip and press ⑥ (ENTER).



The indication changes from "Play" to "Skip." If you want to return to"Play," press ⑥ (ENTER) again.

3 Repeat step 2 to set the "Play" or "Skip" mode on all the tracks.

4 Press ④ (PLAY MODE) for two seconds.
The unit returns to normal CD playback mode.

5 Press (SHIFT).

Notes

- *You can set the "Play" and "Skip" mode on up to 24 tracks.*
- *You cannot set the "Skip" mode on all the tracks.*

Playing the specific tracks only

You can select:

- Bank on to play the tracks with the "Play" setting.
- Bank inv (Inverse) to play the tracks with the "Skip" setting.

1 During playback, press (SHIFT), then press ④ (PLAY MODE) repeatedly until "Bank" appears.

2 Press ⑤ (→) to repeatedly until the desired setting appears.

→ Bank on → Bank inv → Bank off

Playback starts from the track following the current one.

3 Press (SHIFT).

To go back to normal playing mode, select "Bank off" in step 2 above.

EN

Connexions

Précautions

- Cet appareil est conçu pour fonctionner sur courant continu de 12 V avec masse négative.
- Brancher le cordon d'alimention ⑨ sur l'appareil et les haut-parleurs avant de le brancher sur le connecteur d'alimentation auxiliaire.
- **Rassembler tous les fils de terre en un point de masse commun.**
- Brancher le câble jaune à un circuit libre de la voiture dont la capacité nominale est supérieure à la capacité du fusible de l'appareil. Si vous branchez cet appareil en série avec d'autres composants stéréo, le circuit de la voiture auquel ils sont raccordés doit afficher une capacité nominale supérieure à la somme des capacités individuelles de chaque composant. S'il n'y a pas de circuits de voiture affichant une capacité égale à la capacité du fusible de l'appareil, brancher l'appareil directement à la batterie. Si aucun circuit de voiture n'est disponible pour connecter cet appareil, brancher l'appareil à un circuit de voiture supérieur à la capacité du fusible de l'appareil de telle sorte que si l'appareil grille son fusible, aucun autre circuit ne soit coupé.

Si l'appareil est utilisé dans une voiture dont la clé de contact n'a pas de position accessoires — Interrupteur POWER SELECT

L'éclairage du panneau avant est réglé en usine de manière à s'allumer même quand l'appareil ne fonctionne pas. Cependant, ce réglage risque d'épuiser la batterie **si l'appareil est utilisé dans une voiture dont la clé de contact ne possède pas de position accessoires**. Pour éviter d'épuiser la batterie, régler l'interrupteur **POWER SELECT sur le socle de l'appareil sur la position ⑮, puis appuyer sur la touche de réinitialisation**. L'éclairage est réglé pour rester éteint quand l'appareil n'est pas utilisé.

Remarques

- *Quand l'interrupteur POWER SELECT est réglé sur la position ⑮, l'avertisseur et l'indicateur TIR du panneau avant ne sont pas activés.*
- *N'exercez pas une pression excessive lorsque vous commutez l'interrupteur POWER SELECT.*

Remarques sur l'exemple de connexion

Remarques sur les fils de contrôle

- *Le fil d'alimentation (bleu) de l'antenne électrique fournit un courant continu de + 12 V lorsque le syntoniseur est sous tension ou lorsque vous activez la fonction ATA (Activation automatique du syntoniseur), AF (Fréquences alternatives), TA (Annonce trafic) ou TIR (Répétition des informations routières).*
- *Une antenne électrique sans boitier de relais ne peut pas être utilisée avec cet appareil.*

Connexion pour la conservation de la mémoire

Lorsque le fil d'entrée d'alimentation jaune est connecté, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur la connexion des haut-parleurs

- *Avant de raccorder les haut-parleurs, mettre l'appareil hors tension.*
- *Utiliser des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne pas raccorder les bornes du système de haut-parleurs au châssis de la voiture et ne pas connecter les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne pas tenter de raccorder les haut-parleurs en parallèle.*
- *Ne pas connecter d'enceintes acoustiques actives (avec amplificateurs intégrés) aux bornes d'enceinte de cet appareil, pour éviter d'endommager les enceintes. Veiller à raccorder des enceintes passives.*

Avertissment

Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni ⑨ risque d'endommager l'antenne.

Inverseur

- *Installez l'inverseur à l'écart de l'appareil au moyen de bande adhésive double face ou d'un support similaire.*
- *N'installez pas l'inverseur sous un tapis ou à un endroit exposé aux projections d'eau ou à un climatiseur. Vous risquez sinon de provoquer une électrocution ou d'endommager l'appareil.*

Remarque

Si le cordon de l'inverseur est coincé, il se peut qu'aucune indication n'apparaisse dans la fenêtre d'affichage.

Anschluß

Vorsicht

- Dieses Gerät ist ausschließlich für eine negativ geerdete 12-V-Autobatterie bestimmt.
- Verbinden Sie das Netzverbindungskabel ⑨ mit dem Gerät und den Lautsprechern, bevor Sie es mit dem Hilfsstromanschluß verbinden.
- **Schließen Sie alle Erdungskabel an einen gemeinsamen Massepunkt an.**
- Schließen Sie das gelbe Kabel an einen freien Autostromkreis mit höherer Leistung als der der Gerätesicherung an. Wenn Sie dieses Gerät zusammen mit anderen Stereokomponenten anschließen, muß der Autostromkreis, an den die Geräte angeschlossen sind, eine höhere Leistung aufweisen als die Summe der Sicherungen der einzelnen Komponenten. Wenn kein Autostromkreis eine so hohe Leistung aufweist wie die Sicherung des Geräts, schließen Sie das Gerät direkt an die Batterie an. Wenn kein Autostromkreis zum Anschließen dieses Geräts frei ist, schließen Sie das Gerät an einen Autostromkreis mit höherer Leistung als der der Gerätesicherung an, und zwar so, daß keine anderen Stromkreise unterbrochen werden, wenn die Sicherung durchbrennen sollte.

Wenn das Zündschloß Ihres Wagens keine Position I bzw. ACC besitzt — POWER SELECT-Schalter

Das Gerät ist werkseitig so voreingestellt, daß das Bedienfeld auch dann beleuchtet ist, wenn das Gerät nicht betrieben wird. **Besitzt das Zündschloß Ihres Fahrzeugs keine Position I bzw. ACC**, so ist die Beleuchtung ständig eingeschaltet und entzieht der Batterie Strom. Stellen Sie in einem solchen Fall **den POWER SELECT-Schalter an der Unterseite des Geräts auf Position ⑮, und drücken Sie dann die Rücksetztaste**. Bei ausgeschaltetem Gerät ist das Bedienfeld dann nicht mehr beleuchtet.

Hinweise

- *Der Warnton für die Frontplatte ertönt nicht, und die Anzeige TIR wird nicht aktiviert, wenn der POWER SELECT-Schalter auf Position ⑮ gestellt ist.*
- *Wenden Sie keine übermäßige Kraft an, wenn Sie den POWER SELECT-Schalter verstellen.*

Hinweise zum Anschlußbeispiel

Hinweise zu den Steuerleitungen

- *Die Motorantennen-Steuerleitung (blau) liefert + 12 V Gleichstrom, wenn Sie den Tuner einschalten oder die ATA- (Automatische Tuner-Aktivierung), die AF- (Alternativfrequenzsuche), die TA- (Verkehrsdurchsagen) bzw. die TIR-Funktion (Traffic Information Replay) aktivieren.*
- *Es kann nur eine Motorantenne mit Relaisbox angeschlossen werden.*

Zur Stromversorgung des Speichers

Wenn das gelbe Stromversorgungskabel angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluß

- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenchassis, und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da diese sonst beschädigt werden können.*

Warnung

Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit dem mitgelieferten Netzverbindungskabel ⑨ die Antenne beschädigt werden.

Wechselrichter

- *Montieren Sie den Wechselrichter mit doppelseitigem Klebeband o. ä. weit entfernt vom Gerät.*
- *Achten Sie darauf, den Wechselrichter nicht unter einer Matte oder an einem Ort anzubringen, an dem er Spritzwasser der Klimaanlage ausgesetzt ist. Andernfalls kann es zu einem elektrischen Schlag kommen, oder das Gerät kann beschädigt werden.*

Hinweis

Wenn das Kabel des Wechselrichters geknickt ist, erscheinen die Anzeigen im Display möglicherweise nicht.

Aansluitingen

Let op!

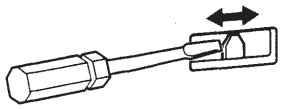
- Dit apparaat is ontworpen voor gebruik op gelijkstroom van een 12 Volts auto-accu, negatief geaard.
- Sluit het netsnoer ⑨ aan op het toestel en de luidsprekers vooraleer u het op de hulpvoedingsaansluiting aansluit.
- **Sluit alle aarddraden op een gemeenschappelijk aardpunt aan.**
- Sluit het gele snoer aan op een vrij autocircuit met een capaciteit die hoger ligt dan die van de toestelzekering. Als u dit toestel in serie schakelt met andere audiocomponenten, moet de capaciteit van het autocircuit waarop ze zijn aangesloten hoger zijn dan de som van de zekeringcapaciteit van elke component afzonderlijk. Als er geen autocircuits een even hoge capaciteit hebben als de toestelzekering, moet het toestel rechtstreeks worden aangesloten op de accu. Als er geen autocircuits beschikbaar zijn om dit toestel aan te sluiten, moet u het toestel aansluiten op een autocircuit met een hogere capaciteit dan die van de toestelzekering. Indien de toestelzekering dan doorbrandt, worden geen andere circuits onderbroken.

Wanneer het contactslot van uw auto geen "accessory" stand heeft — POWER SELECT schakelaar

De verlichting op het voorpaneel is in de fabriek zo ingesteld dat ze aangaat wanneer de contactsleutel wordt omgedraaid, ook al gebruikt u het apparaat niet. **Dit kan echter leiden tot onnodige uitputting van de accu wanneer het contactslot van uw auto geen "accessory" stand heeft**. Om dit te vermijden, **zet u de POWER SELECT schakelaar aan de onderkant van het apparaat op ⑮ en drukt u vervolgens op de terugsteltoets**. De verlichting zal nu uitblijven als het apparaat niet wordt gebruikt.

Opmerkingen

- *Als de POWER SELECT schakelaar op ⑮ staat, zullen het waarschuwingssignaal voor het voorpaneel en de TIR-indicaties niet functioneren.*
- *Oefen niet teveel kracht uit bij het verzetten van de POWER SELECT schakelaar.*



Opmerkingen bij aansluitingsvoorbeeld

Opmerking betreffende de aansluitsnoeren

- *Het aansluitsnoer voor de automatische antenne (blauw) levert +12 V gelijkstroom als de tuner wordt ingeschakeld of als de functie ATA (Automatische Tuner Activering), AF (Alternatieve Frequenties), TA (Traffic Announcement) of TIR (Traffic Information Replay) wordt geactiveerd.*
- *Met dit apparaat is het niet mogelijk een automatische antenne zonder relaishuis te gebruiken.*

Instandhouden van het geheugen

Zolang de gele stroomdraad is aangesloten, blijft de stroomvoorziening van het geheugen intact, ook wanneer het contact van de auto wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers

- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind in geen geval de aansluitingen van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter en linker luidspreker niet op elkaar aan.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidspreker-aansluiting van dit apparaat. Dit zal leiden tot beschadiging van de actieve luidsprekers. Sluit dus altijd uitsluitend luidsprekers zonder ingebouwde versterker aan.*

Opgelet

Indien u een elektrische antenne heeft zonder relaiskast, kan het aansluiten van deze eenheid met het bijgeleverde netsnoer ⑨ de antenne beschadigen.

Inverter

- *Installeer de inverter op behoorlijk grote afstand van de speler met behulp van dubbelzijdig plakband of dergelijke.*
- *Plaats de inverter niet onder een mat of op een plaats waar hij is blootgesteld aan opspattend water of een airconditioner. Dit kan elektrische schokken of schade aan het apparaat veroorzaken.*

Opmerking

Als de kabel van de inverter geklemd zit, is het mogelijk dat de aanduidingen niet verschijnen in het uitleesvenster.

Collegamenti

Attenzione

- Questo apparecchio è stato progettato per l'uso solo a 12 V CC con massa negativa.
- Collegare il cavo di collegamento dell'alimentazione ⑨ all'apparecchio e ai diffusori prima di collegarlo al connettore di alimentazione ausiliare.
- **Portare tutti i cavi di massa a un punto di massa comune.**
- Collegare il cavo giallo a un circuito libero della macchina con potenza nominale superiore a quella del fusibile dell'apparecchio. Se si collega questo apparecchio in serie con altri componenti stereo, il circuito della macchina a cui sono collegati deve avere una potenza nominale superiore alla somma della potenza dei fusibili di ogni apparecchio. Se i circuiti della macchina non hanno potenza superiore a quella dei fusibili, collegare l'apparecchio direttamente alla batteria. Se non si hanno a disposizione circuiti della macchina con potenza di fusibile uguale a quella di questo apparecchio, collegare l'apparecchio a un circuito della macchina con potenza nominale superiore a quella del fusibile dell'apparecchio di modo che, se il fusibile dell'apparecchio salta, gli altri circuiti non verranno tagliati fuori.

Quando si usa l'apparecchio in un'auto priva di posizione accessoria per la chiavetta di accensione — Interruttore POWER SELECT

L'illuminazione del pannello anteriore è stata predisposta in fabbrica per l'attivazione anche quando non si usa l'apparecchio. Tuttavia questa regolazione può causare scaricamento della batteria dell'auto **se si usa l'apparecchio in un'auto priva di posizione accessoria per la chiavetta di accensione**. Per evitare ciò, **regolare su ⑮ l'interruttore POWER SELECT situato alla base dell'apparecchio e quindi premere il tasto di azzeramento**. L'illuminazione rimane così spenta finché l'apparecchio rimane spento.

Note

- *La suoneria di avvertimento per il pannello anteriore e l'indicatore TIR non si attivano quando l'interruttore POWER SELECT è in posizione ⑮.*
- *Non esercitare troppa forza nel cambiare l'interruttore POWER SELECT.*

Note sui collegamenti

Note sui cavi di controllo

- *Il cavo di controllo dell'antenna elettrica (blu) fornisce + 12 V CC quando si accende il sintonizzatore o quando si attivano le funzioni ATA (attivazione automatica sintonizzatore), AF (frequenza alternativa), TA (notiziari sul traffico) o TIR (ripetizione notiziari sul traffico).*
- *Non è possibile usare un'antenna elettrica senza scatola a relè con questo apparecchio.*

Collegamento per la conservazione della memoria

Quando il cavo di ingresso alimentazione giallo è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando la chiavetta di accensione è spenta.

Note sul collegamento dei diffusori

- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, altrimenti i diffusori possono essere danneggiati.*
- *Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.*
- *Non collegare i diffusori in parallelo.*
- *Non collegare alcun diffusore attivo (con amplificatore incorporato) ai terminali dei diffusori dell'apparecchio perché questo può danneggiare i diffusori attivi. Assicurarsi di collegare diffusori passivi a questi terminali.*

Avvertenza

Quando si collega l'apparecchio con il cavo di alimentazione in dotazione ⑨, si potrebbe danneggiare l'antenna elettrica se questa non ha la scatola di relè.

Invertitore

- *Installare l'invertitore lontano dall'apparecchio con del nastro adesivo sui due lati o qualcosa di simile.*
- *Non installare l'invertitore sotto un tappeto o in un luogo esposto a schizzi di acqua di un condizionatore d'aria. Ciò rischia di causare un corto circuito o danni all'apparecchio.*

Nota

Se il cavo dell'invertitore è piegato, le indicazioni del display potrebbero non apparire.

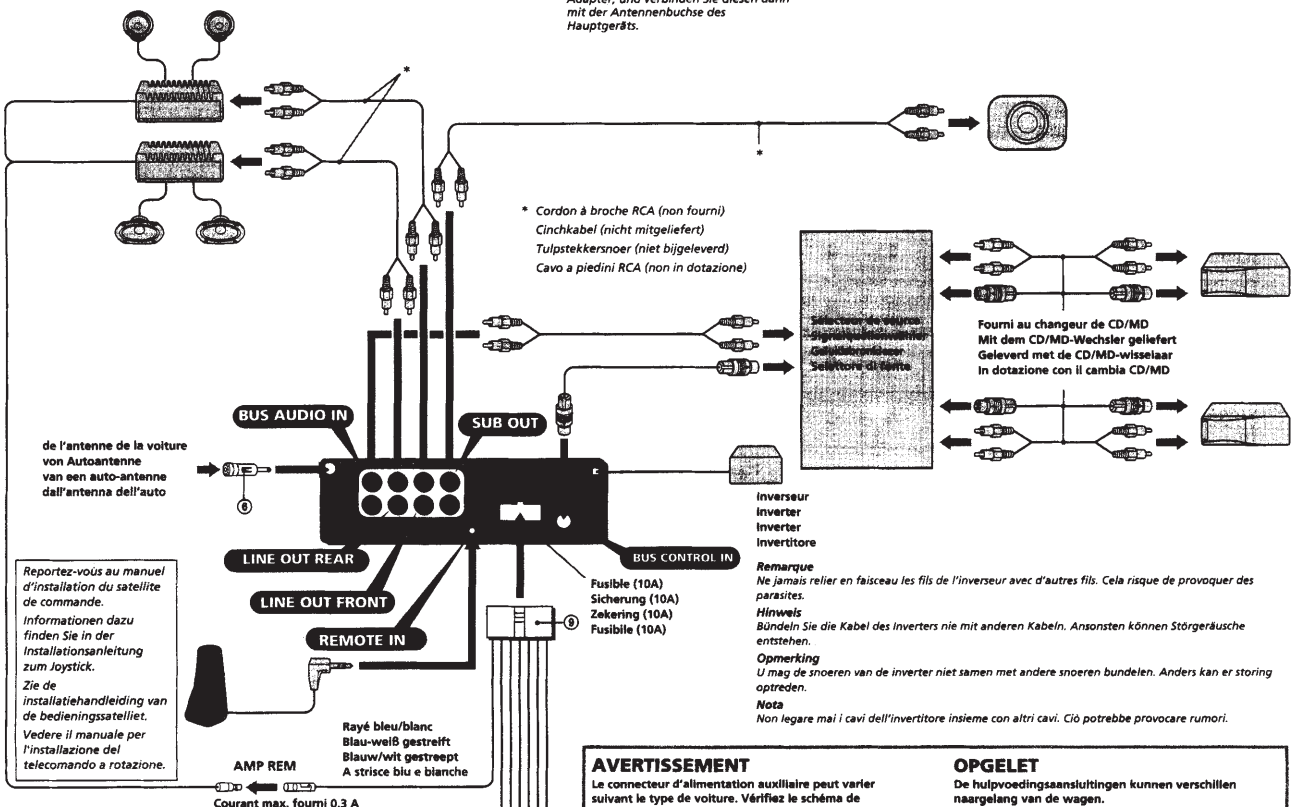
Exemple de raccordement
Anschlußbeispiel
Voorbeeldaansluitingen
Esempi di collegamento

** Remarque sur le raccordement de l'antenne*
Si votre antenne de voiture est de type ISO (organisation internationale de normalisation), utilisez l'adaptateur fourni ⑥ pour la raccorder.
Raccordez d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.

** Hinweis zum Anschließen der Antenne*
Wenn Ihre Fahrzeugantenne der ISO-Norm (ISO = International Organization for Standardization - Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mit Hilfe des mitgelieferten Adapters ⑥ an.
Verbinden Sie zuerst die Fahrzeugantenne mit dem mitgelieferten Adapter, und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.

** Opmerking bij de antenne-aansluiting*
Indien uw wagen is uitgerust met een antenne van het type ISO (International Organisation for Standardization), moet u die aansluiten met behulp van de meegeleverde adaptor ⑥.
Sluit eerst de auto-antenne aan op de meegeleverde adaptor en vervolgens de antennestekker op het hoofdtoestel.

** Nota per il collegamento dell'antenna*
Se la vostra antenna della macchina è di tipo ISO (International Organization Standardization), utilizzare l'adattatore ⑥ in dotazione per collegarla.
Collegare prima l'antenna della macchina all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.



AVERTISSEMENT
Le connecteur d'alimentation auxiliaire peut varier suivant le type de voiture. Vérifiez le schéma de connexion d'alimentation fourni avec l'appareil.
Un raccordement incorrect risque d'occasionner des dommages à votre voiture. Si le cordon d'alimentation fourni ne peut être utilisé avec votre voiture, consultez votre revendeur Sony.

VORSICHT
Die Hilfsstromanschlüsse können je nach Fahrzeugtyp unterschiedlich sein. Sehen Sie im Stromanschlußdiagramm für Ihr Fahrzeug nach, wie die Verbindungen ordnungsgemäß vorgenommen werden müssen.
Fehlerhafte Verbindungen können zu Schäden an Ihrem Fahrzeug führen. Wenn das mitgelieferte Netzverbindungskabel nicht für den Einsatz in Ihrem Fahrzeug geeignet ist, wenden Sie sich bitte an Ihren Sony-Händler.

OPGELET
De hulpvoedingsaansluitingen kunnen verschillen naargelang van de wagen.
Controleer het voedingsaansluitschema dat bij dit toestel wordt geleverd. Onjuiste aansluiting kan uw wagen schade toebrengen.
Indien de meegeleverde stroomaansluitingskabel voor uw wagen niet bruikbaar is, raadpleeg dan uw dichtstbijzijnde Sony-dealer.

Attenzione
Il connettore di alimentazione ausiliare può variare a seconda del tipo di macchina.
Controllare il foglio con il diagramma del connettore di alimentazione in dotazione con l'apparecchio, connessioni non corrette potrebbero danneggiare la macchina.
Se il cavo di collegamento dell'alimentazione in dotazione non può essere utilizzato con la vostra auto, consultare il rivenditore Sony più vicino.

Remarque
Ne jamais relier en faisceau les fils de l'inverseur avec d'autres fils. Cela risque de provoquer des parasites.

Hinweis
Bündeln Sie die Kabel des Inverters nie mit anderen Kabeln. Ansonsten können Störgeräusche entstehen.

Opmerking
U mag de snoeren van de inverter niet samen met andere snoeren bundelen. Anders kan er storing optreden.

Nota
Non legare mai i cavi dell'invertitore insieme con altri cavi. Ciò potrebbe provocare rumori.

1	Mauve Violett Paars Viola	+	haut-parleur, arrière, droit Lautsprecher hinten rechts Luidspreker, achter, rechts Diffusore, posteriore, destro	5	Blanc Weiß Wit Bianco	+	haut-parleur, avant, gauche Lautsprecher vorne links Luidspreker, voor links Diffusore, anteriore, sinistro
2		–	haut-parleur, arrière, droit Lautsprecher hinten rechts Luidspreker, achter, rechts Diffusore, posteriore, destro	6		–	haut-parleur, avant, gauche Lautsprecher vorne links Luidspreker, voor links Diffusore, anteriore, sinistro
3	Gris Grau Grijs Grigio	+	haut-parleur, avant, droit Lautsprecher vorne rechts Luidspreker, voor rechts Diffusore, anteriore, destro	7	Vert Grün Groen Verde	+	haut-parleur, arrière, gauche Lautsprecher hinten links Luidspreker, achter, links Diffusore, posteriore, sinistro
4		–	haut-parleur, avant, droit Lautsprecher vorne rechts Luidspreker, voor rechts Diffusore, anteriore, destro	8		–	haut-parleur, arrière, gauche Lautsprecher hinten links Luidspreker, achter, links Diffusore, posteriore, sinistro

Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
An den negativ gepolten Positionen (2, 4, 6 und 8) befinden sich gestreifte Adern.
De negatieve posities 2, 4, 6 en 8 hebben gestreepte kabels.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.

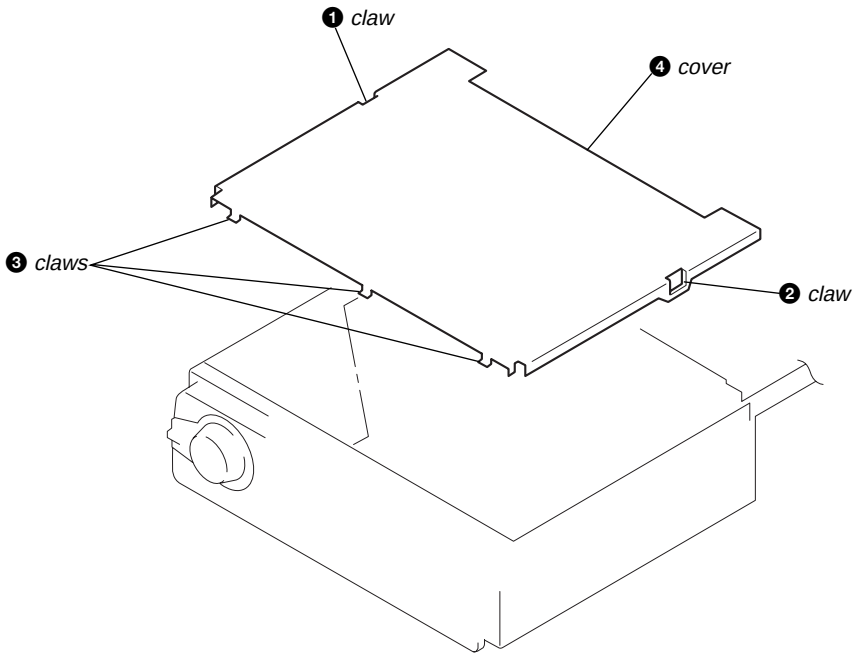
4	Jaune Gelb Geel Giallo	alimentation continue permanente Stromversorgung continu voeding alimentazione continua	7	Rouge Rot Rood Rosso	alimentation commutée geschaltete Stromversorgung geschakelde voeding alimentazione a scatto
5	Bleu Blau Blauw Blu	antenne électrique elektronische Antenne automatische antenne comando dell'antenna elettrica	8	Noir Schwarz Zwart Nero	masse Masse aarding terra
6	Rayé orange/blanc Orange-weiß gestreift Oranje/wit gestreept Arancione/bianco	alimentation de l'éclairage commuté zündungsabhängige Beleuchtungsstromversorgung geschakelde verlichting stroomvoorziening alimentazione a illuminazione commutata			

Les positions 1, 2 et 3 ne comportent pas de broche.
An Position 1, 2 und 3 befinden sich keine Stifte.
De posities 1, 2 en 3 hebben geen pins.
Le posizioni 1, 2 e 3 non hanno piedini.

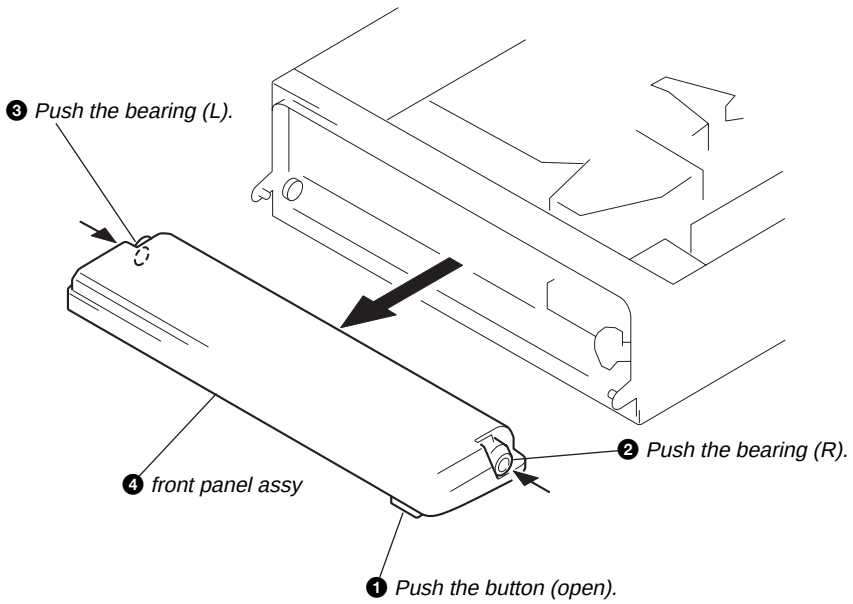
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

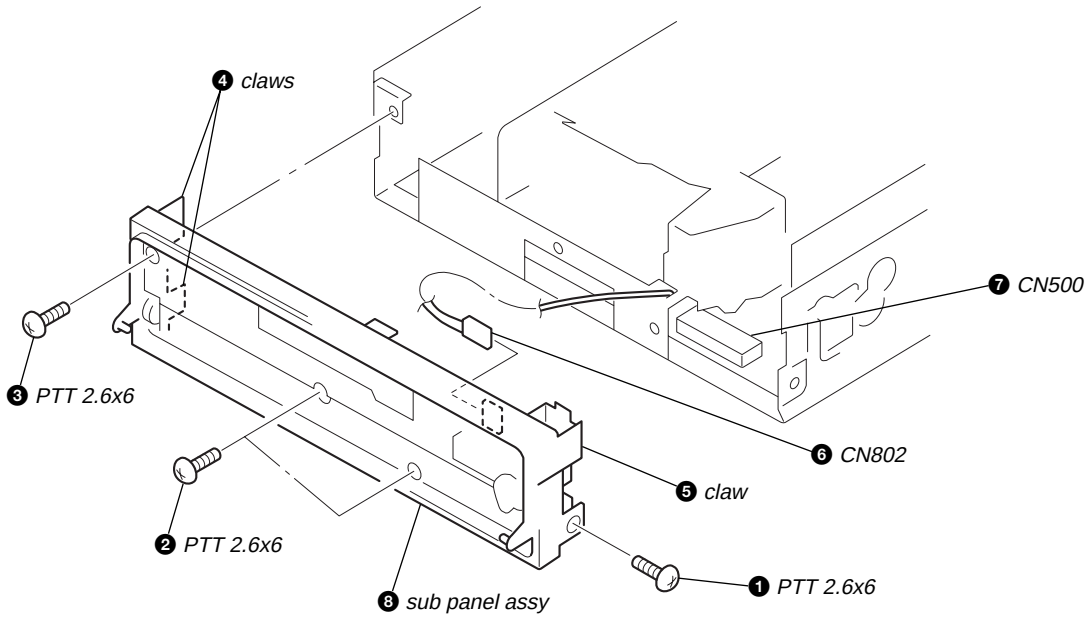
2-1. COVER



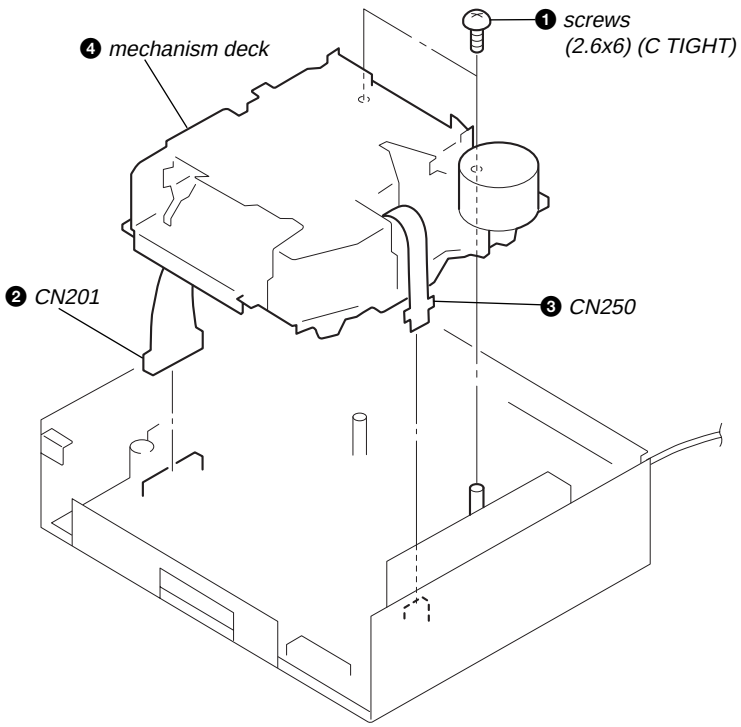
2-2. FRONT PANEL ASSY



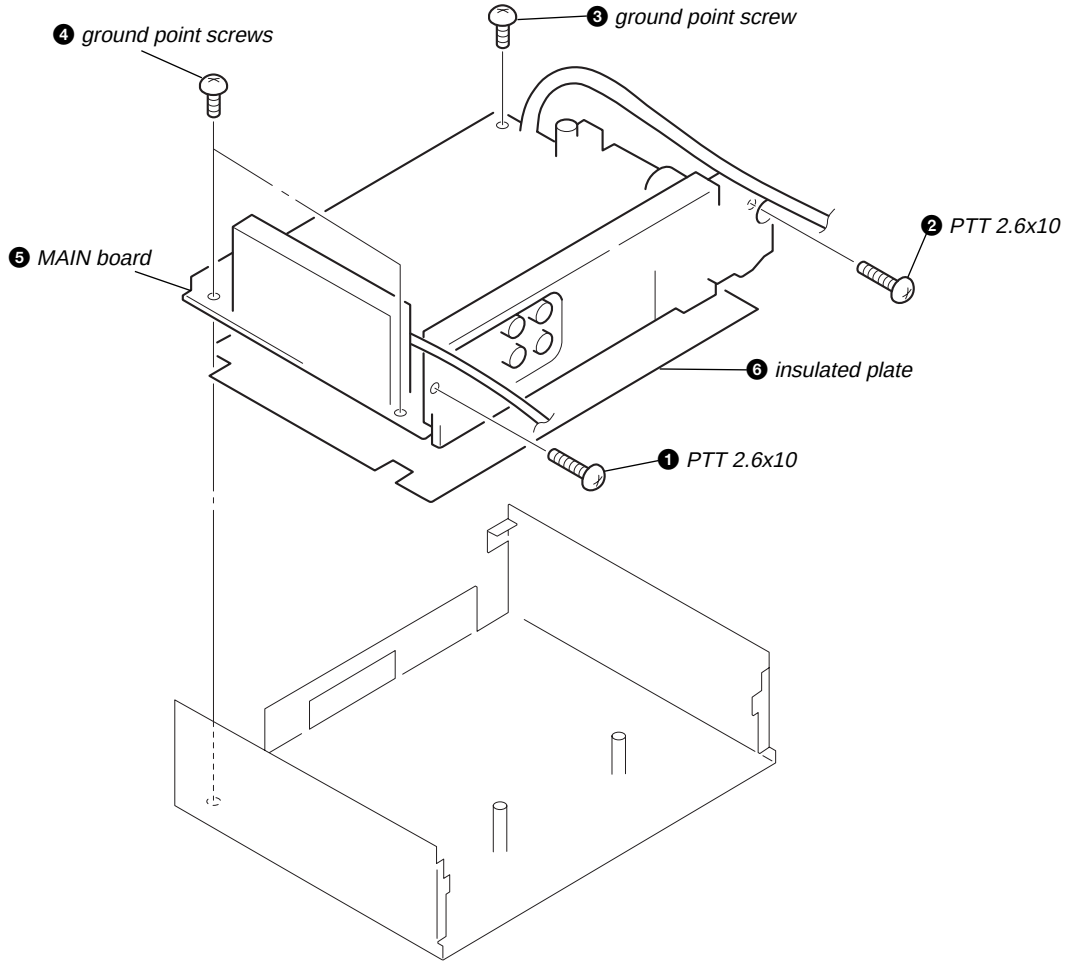
2-3. SUB PANEL ASSY



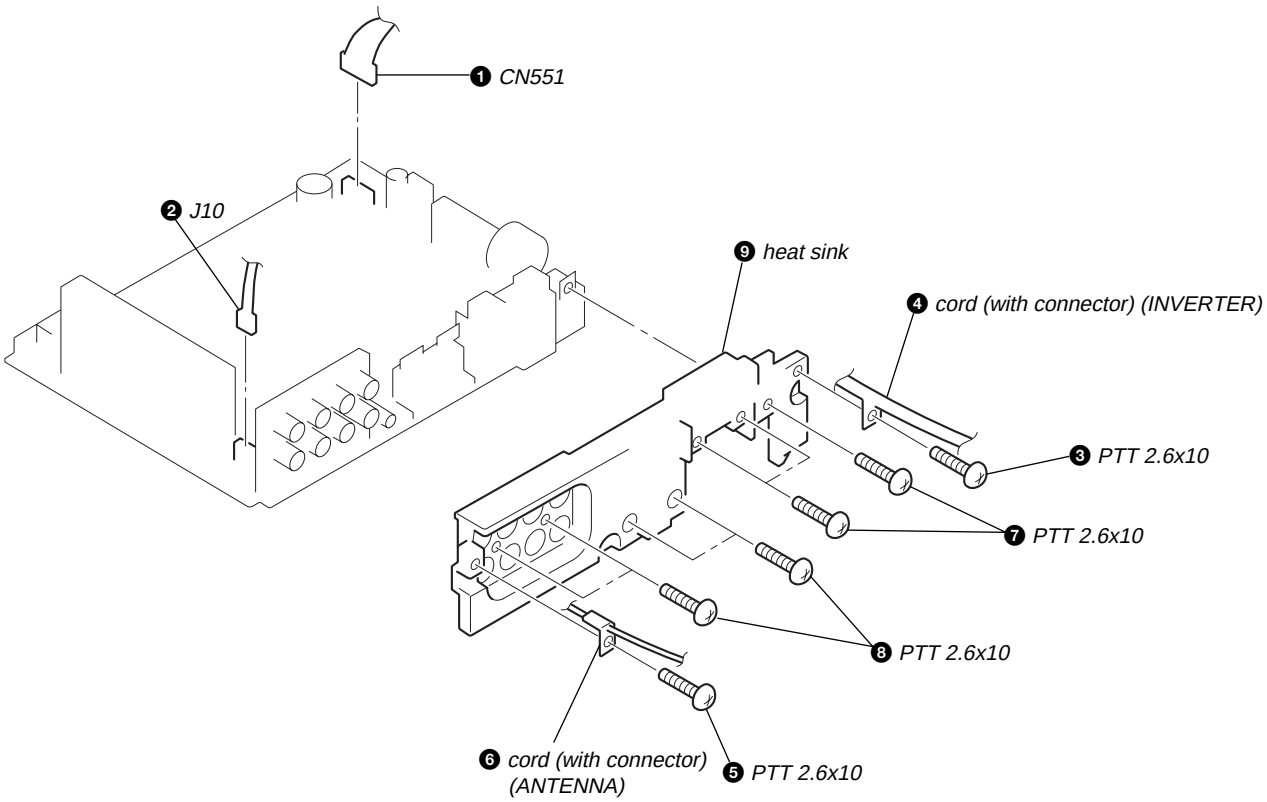
2-4. MECHANISM DECK



2-5. MAIN BOARD



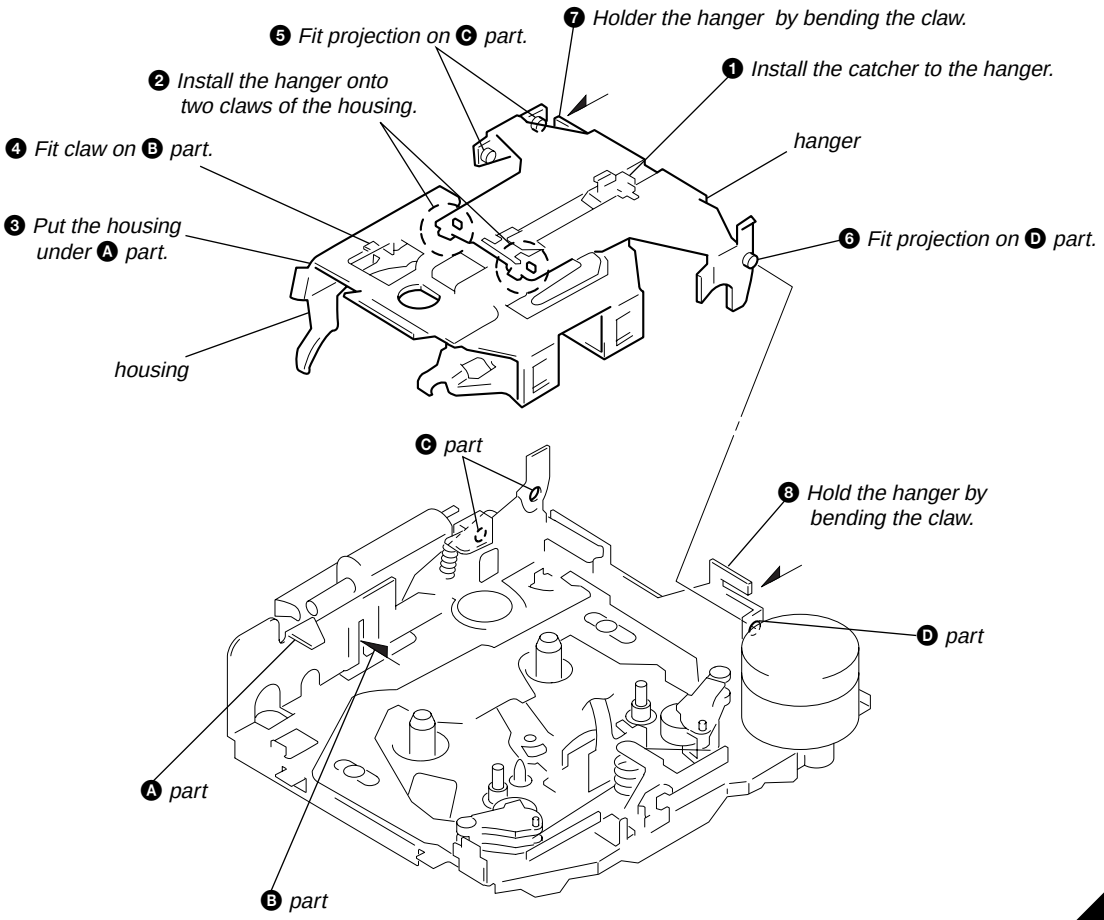
2-6. HEAT SINK



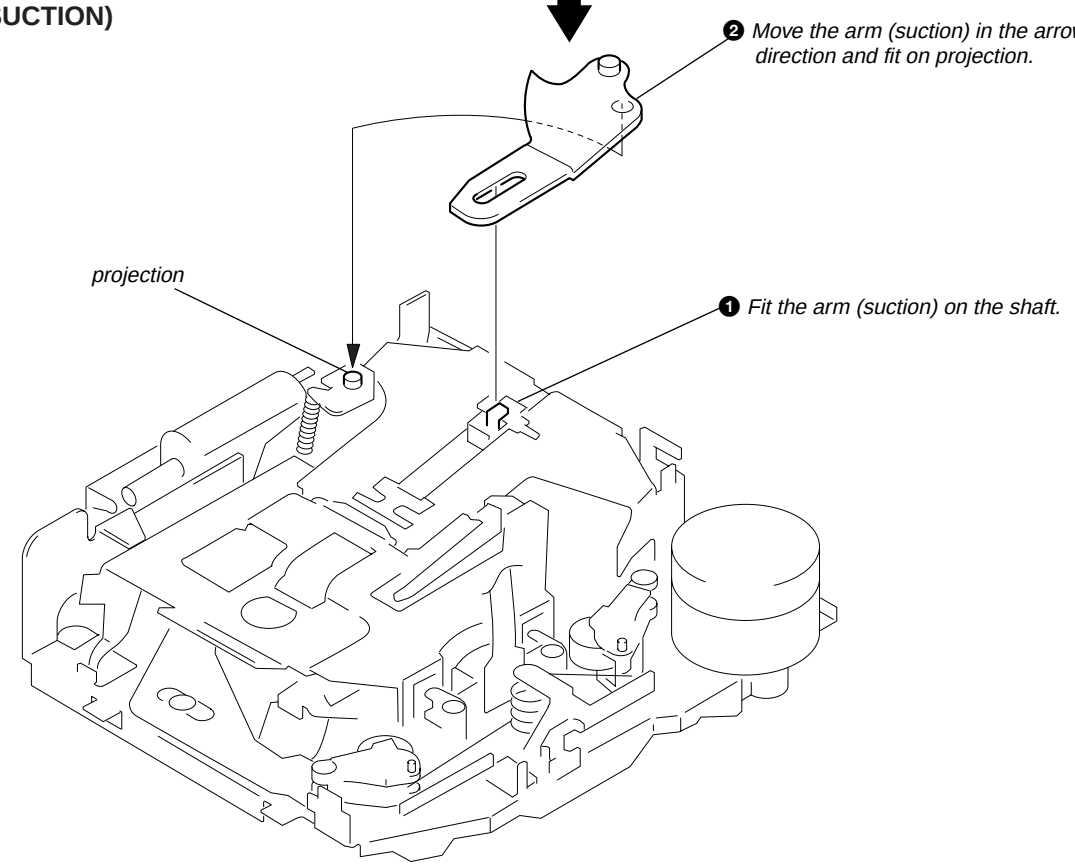
SECTION 3
ASSEMBLY OF MECHANISM DECK

Note : Follow the assembly procedure in the numerical order given.

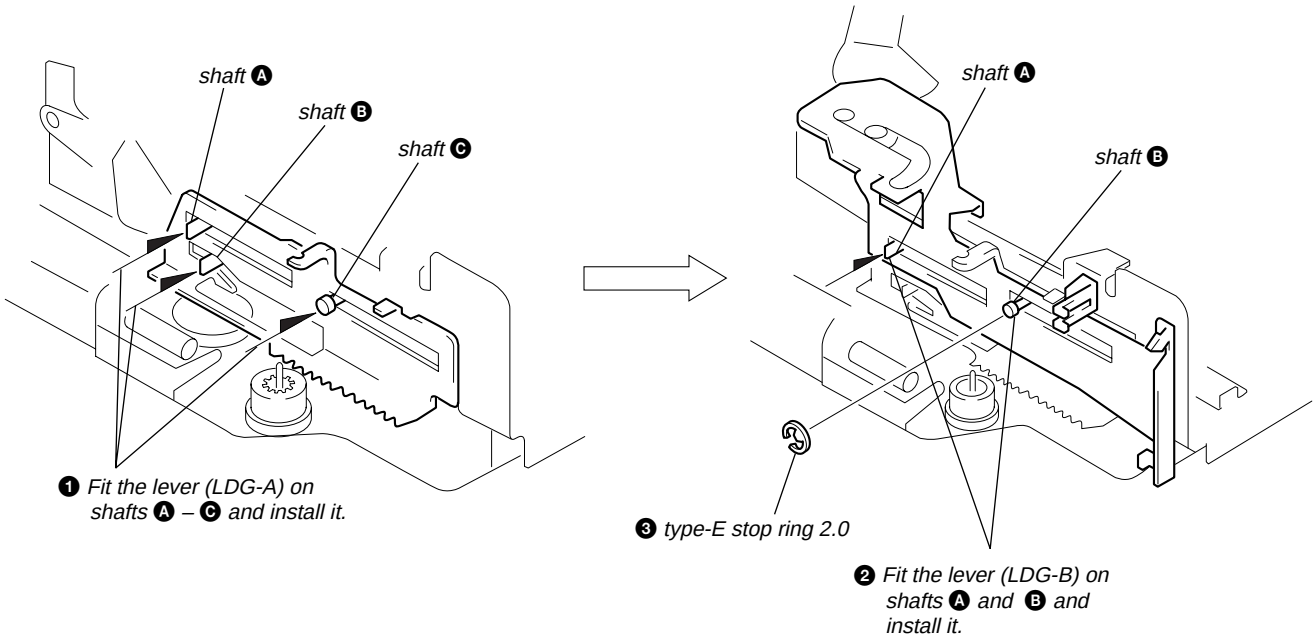
HOUSING


❼ Holder the hanger by bending the claw.
❺ Fit projection on Ⓒ part.
❶ Install the catcher to the hanger.
❷ Install the hanger onto two claws of the housing.
hanger
❹ Fit claw on Ⓑ part.
❸ Put the housing under Ⓐ part.
❻ Fit projection on Ⓓ part.
housing
Ⓒ part
❽ Hold the hanger by bending the claw.
Ⓓ part
Ⓐ part
Ⓑ part

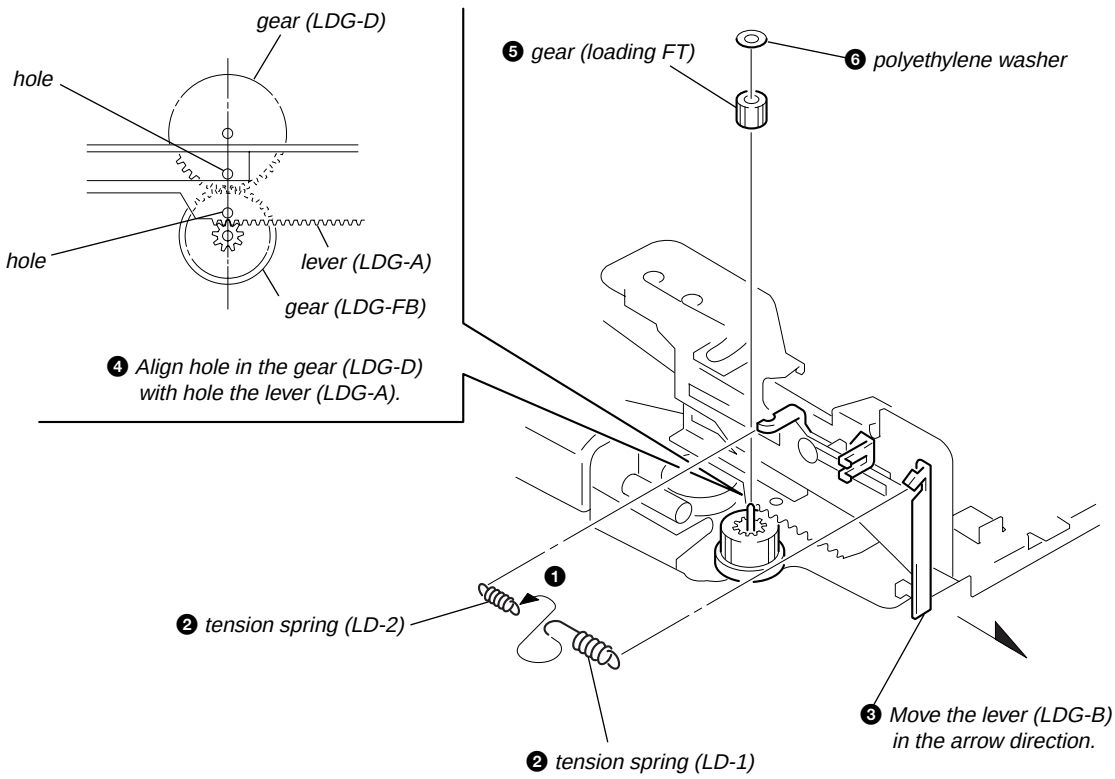
ARM (SUCTION)



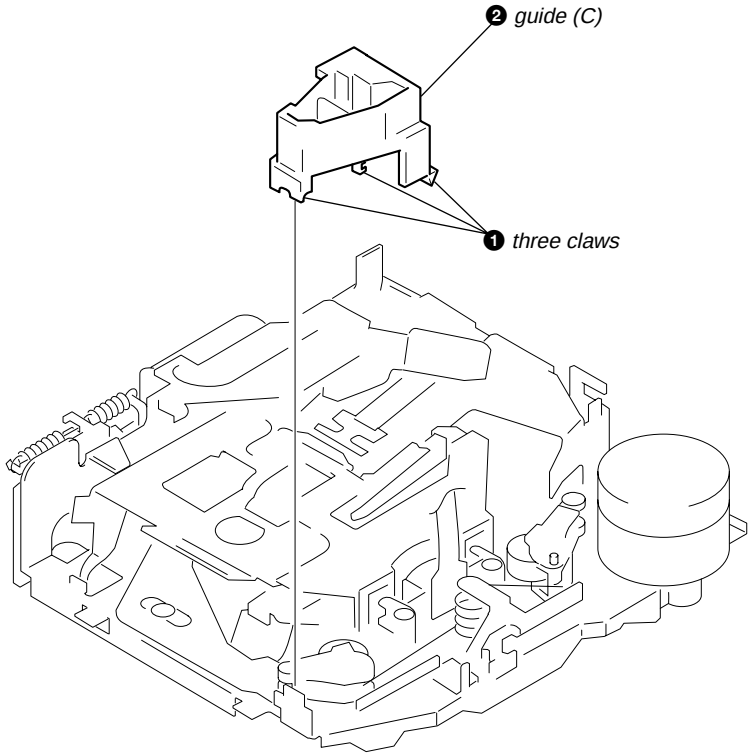
LEVER (LDG-A) / (LDG-B)


shaft Ⓐ
shaft Ⓑ
shaft Ⓒ
❶ Fit the lever (LDG-A) on shafts Ⓐ – Ⓒ and install it.
shaft Ⓐ
shaft Ⓑ
❸ type-E stop ring 2.0
❷ Fit the lever (LDG-B) on shafts Ⓐ and Ⓑ and install it.

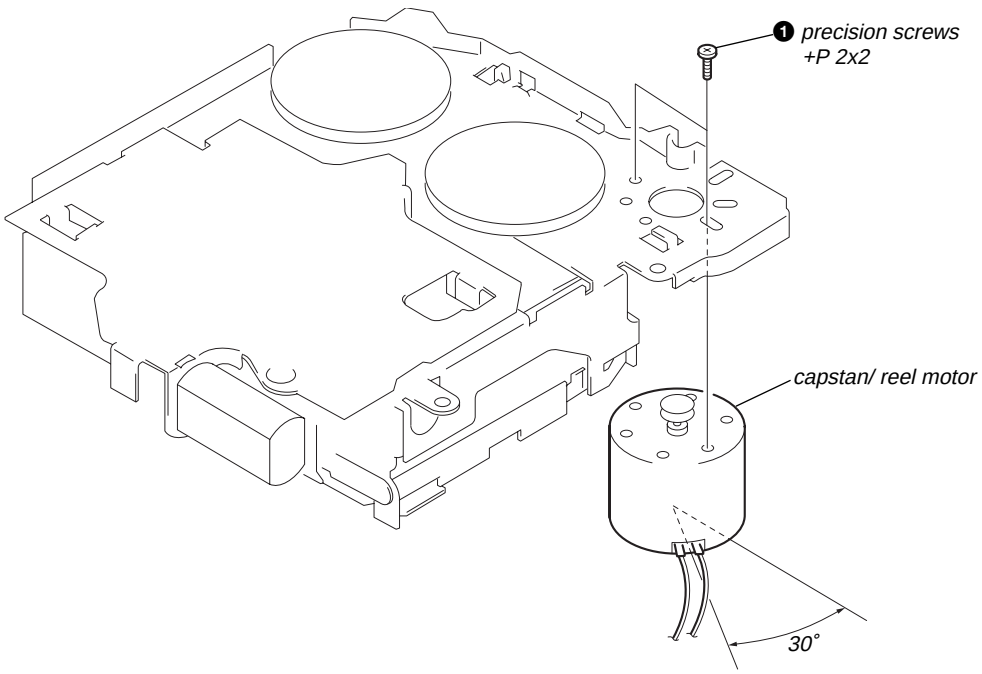
GEAR (LOADING FT)



GUIDE (C)



MOUNTING POSITION OF CAPSTAN/REEL MOTOR (M901)



SECTION 4
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Wipe the following components with an absorbent cotton cloth moistened with alcohol before adjustment :
   PB head Pinch roller
   Idler Rubber belt
   Capstan
2. Demagnetize the PB head using a head demagnetizer.
3. Be careful not to use a magnetized screwdriver.
4. After the adjustment is completed, lock the adjustment parts using screws.
5. Unless otherwise specified, make adjustments at the specified voltage (14.4V).

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	35 – 65 g • cm (0.49 – 0.90 oz • inch)
FWD Back Tension		0.5 – 5.0 g • cm (0.01 – 0.07 oz • inch)
REV	CQ-102RC	35 – 65 g • cm (0.49 – 0.90 oz • inch)
REV Back Tension		0.5 – 5.0 g • cm (0.01 – 0.07 oz • inch)
FF, REW	CQ-201B	60 – 200 g • cm (0.83 – 2.78 oz • inch)

Tape Tension Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 60 g (more than 2.12 oz)
REV	CQ-403R	

SECTION 5
ELECTRICAL ADJUSTMENTS

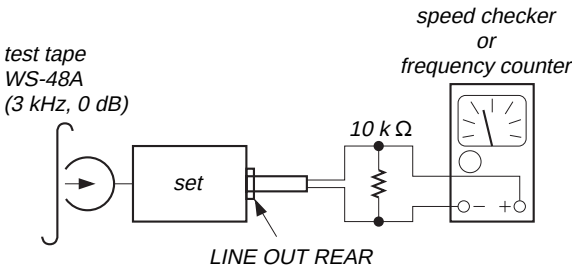
See the adjustment location from on page 28 for the adjustment.

TAPE SECTION **0 dB = 0.775 V**

Tape Speed Adjustment

Procedure :

1. Put the set into the FWD PB mode.



Specification : Constant speed

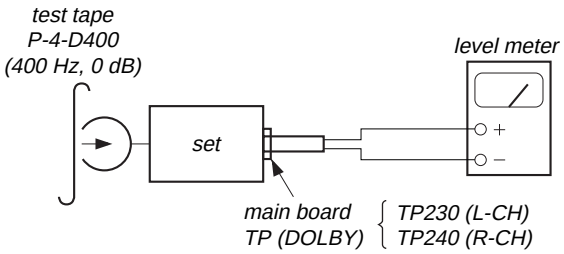
Speed checker	Frequency counter
– 1 to + 2 %	2,970 to 3,060 Hz

Adjustment Location : See page 28.

DOLBY Level Adjustment

Setting :

SHIFT → 3 (PLAY MODE) (twice) button : NR off



Procedure :

1. Put the set into the FWD PB mode.
2. Adjust RV230 (L-CH) and RV240 (R-CH) so that level meter reading is – 6 ± 1 dB (0.35 to 0.44 V).

Adjustment Location : See page 28.

TUNER SECTION **0 dB = 1 μV**

Cautions during repair
When the tuner unit is defective, replace it by a new one because its internal block is difficult to repair.

TEST MODE

This set have the test mode function. In the test mode, FM Auto Scan/Stop Level and AM (MW) Auto Scan/Stop Level adjustments can be performed easier than it in ordinary procedure.

<Set the Test Mode>
1. Set the "OFF" mode.
2. Push the preset [4] button.
3. Push the preset [5] button.
4. Press the preset [1] button for more than two seconds.
5. Then the display indicates all lights, the test mode is set.

<Release the Test Mode>
1. Push the [OFF] button.

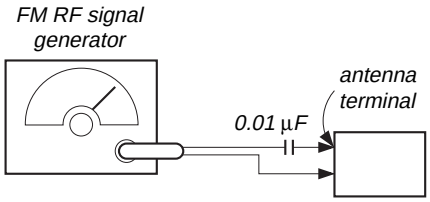
Note on Adjustment

The adjustments of tuner section, should be performed according to the following sequence.
1. FM Auto Scan/Stop Level Adjustment
2. FM Stereo Separation Adjustment (WIDE)
3. FM Stereo Separation Adjustment (NARROW)
4. FM RDS S-Meter Adjustment (XR-C8100R only)
5. AM (MW) Auto Scan/Stop Level Adjustment

FM Auto Scan/Stop Level Adjustment

Setting :

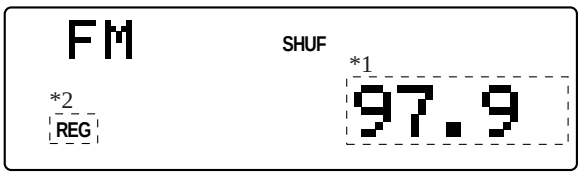
SOURCE button : FM
FREQUENCY SELECT switch (C8100) : FM 200K



Carrier frequency : 97.9 MHz (C8100)
98.00 MHz (C8100R)
Output level : 22 dB (12.6 μV)
Mode : mono
Modulation : 1 kHz, 22.5 kHz deviation (30%)

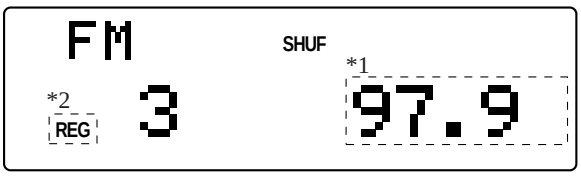
Procedure :
1. Set to the test mode.
2. Push the [SOURCE] button and set to FM.

Display



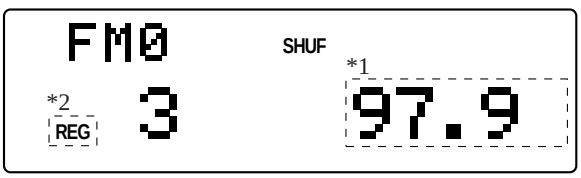
3. Push the preset [3] button.

Display



4. Adjust with the volume RV2 on TUX10 so that the "FM" indication turns to "FM0" indication on the display window. But, in case of already indicated "FM0", turn the RV2 so that put out light "0" indication and adjustment.

Display



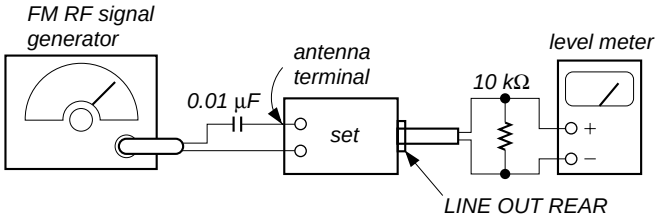
*1 : XR-C8100R has the "98.00" displayed.
*2 : "REG" is displayed only for XR-C8100R.

Adjustment Location : See page 28.

FM Stereo Separation Adjustment (WIDE)

Setting :

SOURCE button : FM
FREQUENCY SELECT switch (C8100) : FM 200K



Carrier frequency : 97.9 MHz (C8100)
: 98.00 MHz (C8100R)
Output level : 70 dB (3.2 mV)
Mode : stereo
Modulation : main : 1 kHz, 33.75 kHz deviation (45%) (C8100)
1 kHz, 20 kHz deviation (26.5%) (C8100R)
sub : 1 kHz, 33.75 kHz deviation (45%) (C8100)
1 kHz, 20 kHz deviation (26.5%) (C8100R)
19 kHz pilot : 7.5 kHz deviation (10%)

Procedure :

1. Set to the test mode.
2. Push the [SHIFT] button.
3. Push the [4] button three times.
4. Push the [5] button once and set to WIDE mode.

FM stereo signal generator output channel	Level meter connection	Level meter reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV3 on TUX10 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV3 on TUX10 for minimum reading.

L-CH stereo separation : Ⓐ – Ⓑ
R-CH stereo separation : Ⓒ – Ⓓ
The separations of both channels should be equal.

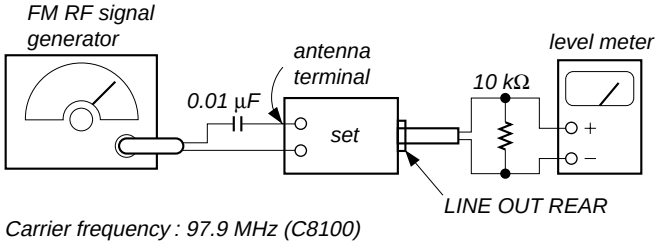
Specification : Separation more than 24 dB

Adjustment Location : See page 28.

FM Stereo Separation Adjustment (NARROW)

Setting :

SOURCE button : FM
FREQUENCY SELECT switch (C8100) : FM 200K



Carrier frequency : 97.9 MHz (C8100)
: 98.00 MHz (C8100R)
Output level : 70 dB (3.2 mV)
Mode : stereo
Modulation : main : 1 kHz, 33.75 kHz deviation (45%) (C8100)
1 kHz, 20 kHz deviation (26.5%) (C8100R)
sub : 1 kHz, 33.75 kHz deviation (45%) (C8100)
1 kHz, 20 kHz deviation (26.5%) (C8100R)
19 kHz pilot : 7.5 kHz deviation (10%)

Procedure :

1. Set to the test mode.
2. Push the [SHIFT] button.
3. Push the [4] button three times.
4. Push the [5] button twice and set to NARROW mode.

FM stereo signal generator output channel	Level meter connection	Level meter reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV4 on TUX10 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV4 on TUX10 for minimum reading.

L-CH stereo separation : Ⓐ – Ⓑ
R-CH stereo separation : Ⓒ – Ⓓ
The separations of both channels should be equal.

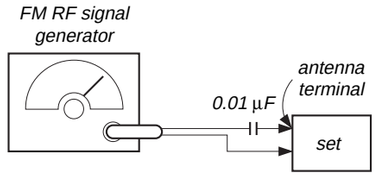
Specification : Separation more than 18 dB

Adjustment Location : See page 28.

FM RDS S-Meter Adjustment (XR-C8100R only)

Setting :

SOURCE button : FM

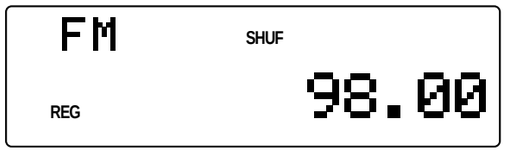


Carrier frequency : 98.00 MHz
Output level : 35 dB (56.2 µV)
Mode : mono
Modulation : no modulation

Procedure :

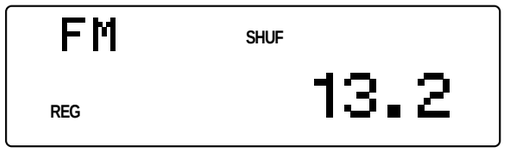
1. Set to the test mode. (See page 25.)
2. Push the SOURCE button and set to FM.

Display



3. Push the preset 10 button.
4. Adjust RV10 so that the display indication is “13.2”.

Display



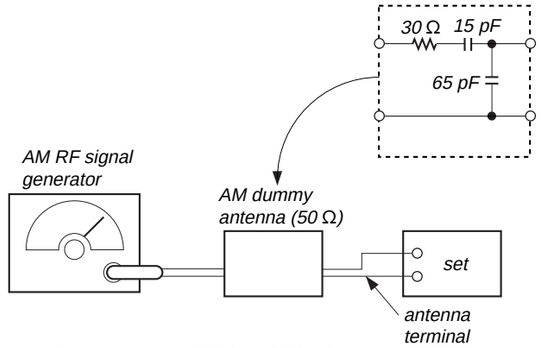
Specification : Display indication : 13.0 to 13.4

Adjustment Location : See page 28.

AM (MW) Auto Scan/Stop Level Adjustment

Setting :

SOURCE ⟶ MODE button : AM (C8100)
MW (C8100R)
FREQUENCY SELECT switch (C8100) : AM 10K

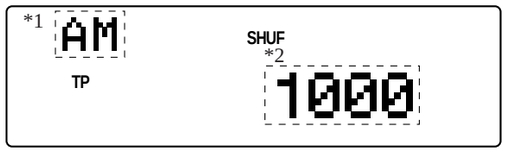


Carrier frequency : 1000 kHz (C8100)
999 kHz (C8100R)
30% amplitude modulation by 1 kHz signal output level : 33 dB (44.7 µV)

Procedure :

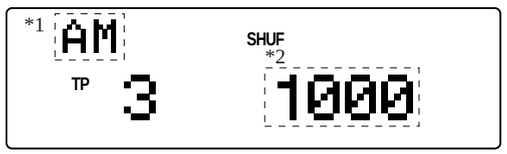
1. Set to the test mode. (See page 25.)
2. Push the SOURCE button.
3. Push the MODE button and set to AM (C8100) or MW (C8100R).

Display



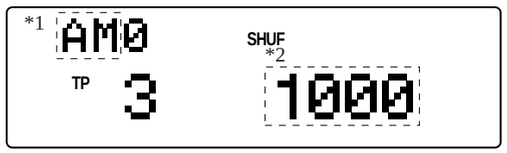
4. Push the preset 3 button.

Display



5. Adjust with the volume RV1 on TUX10 so that the “AM” (C8100) or “MW” (C8100R) indication turns to “AM0” (C8100) or “MW” (C8100R) indication on the display window. But, in case of already indicated “AM0” (C8100) or “MW” (C8100R), turn the RV1 so that put out light “0” indication and adjustment.

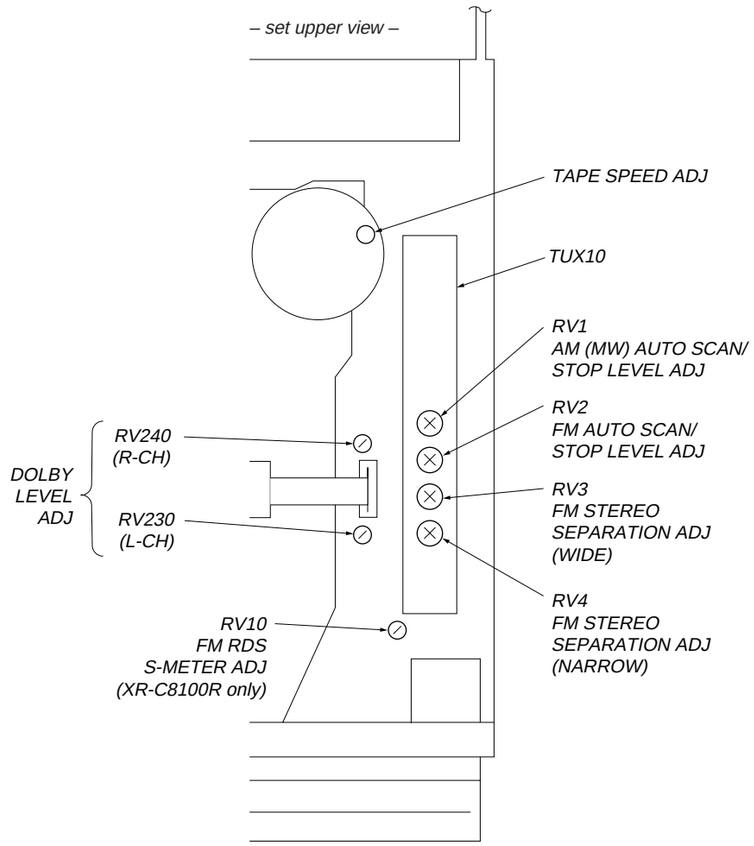
Display



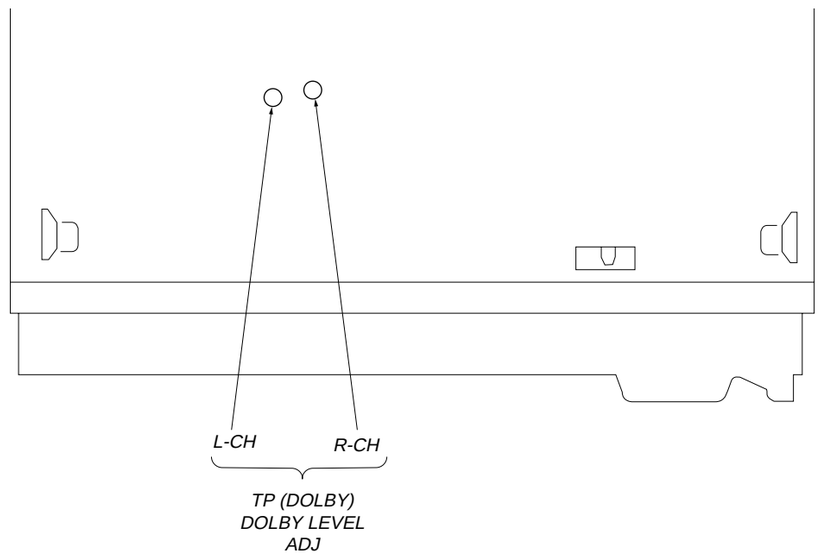
*1 : XR-C8100R has the “MW” displayed.
*2 : XR-C8100R has the “999” displayed.

Adjustment Location : See page 28.

Adjustment Location : tuner unit (TUX10)

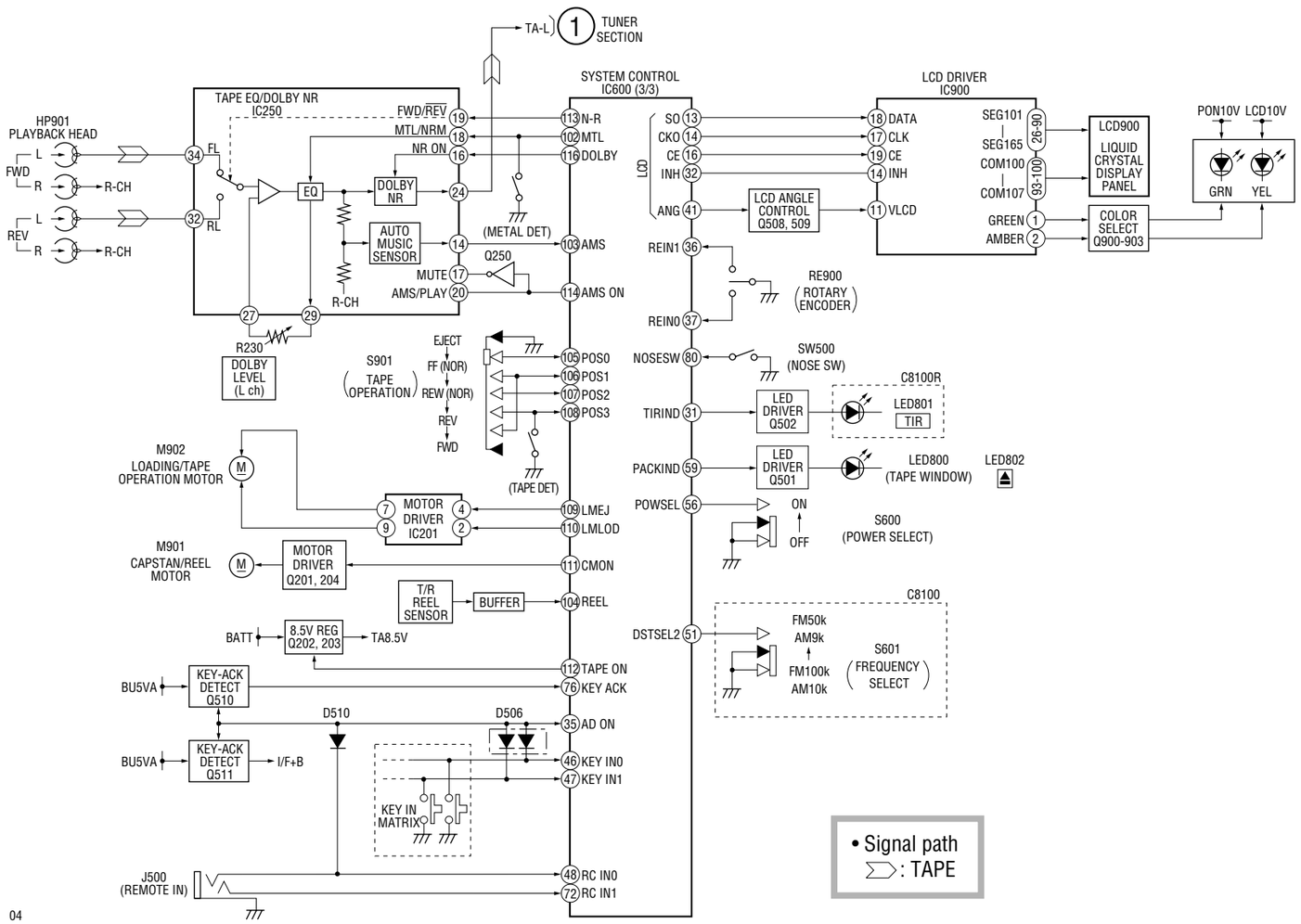


– set lower view –

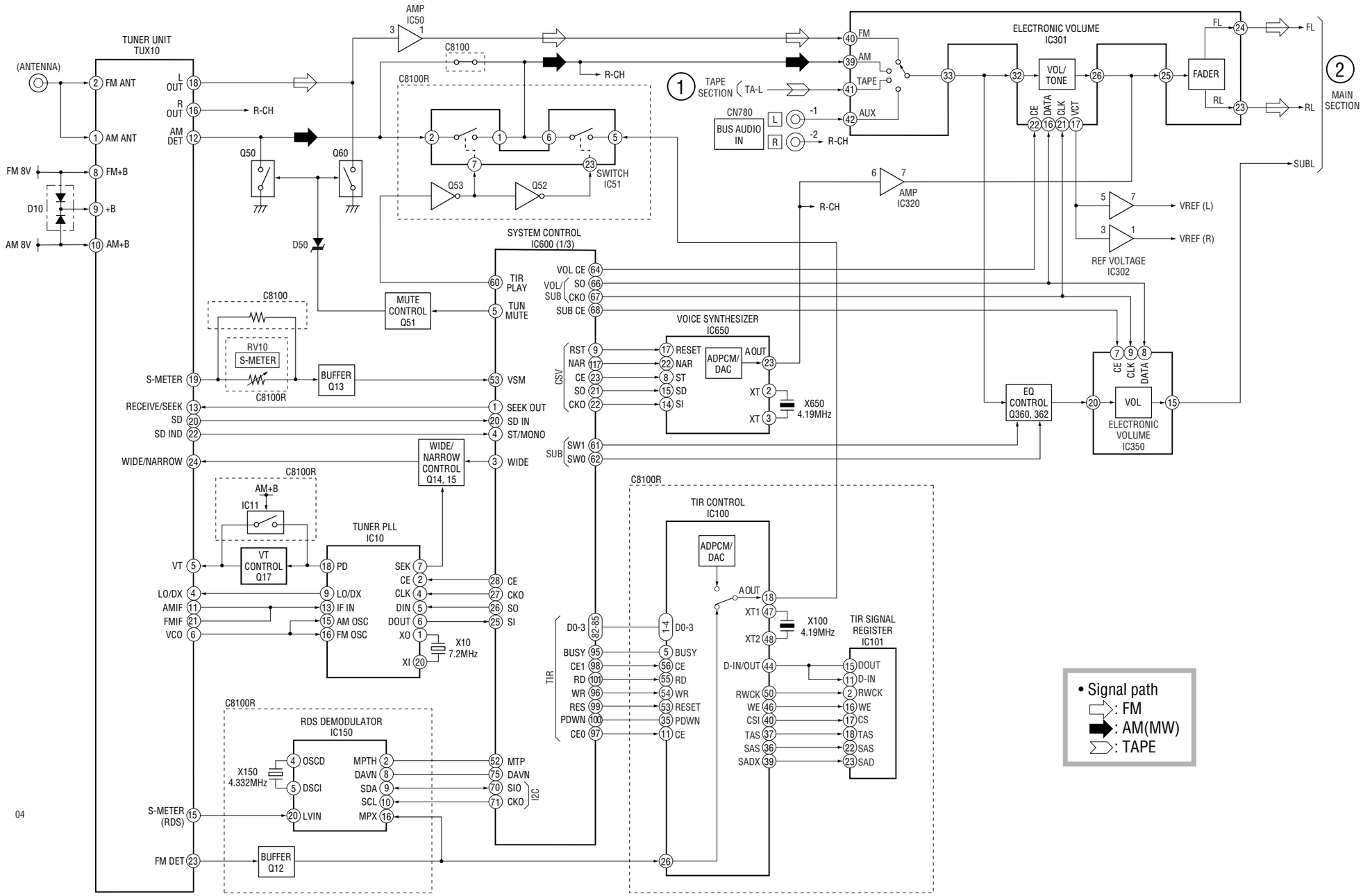


SECTION 6
DIAGRAMS

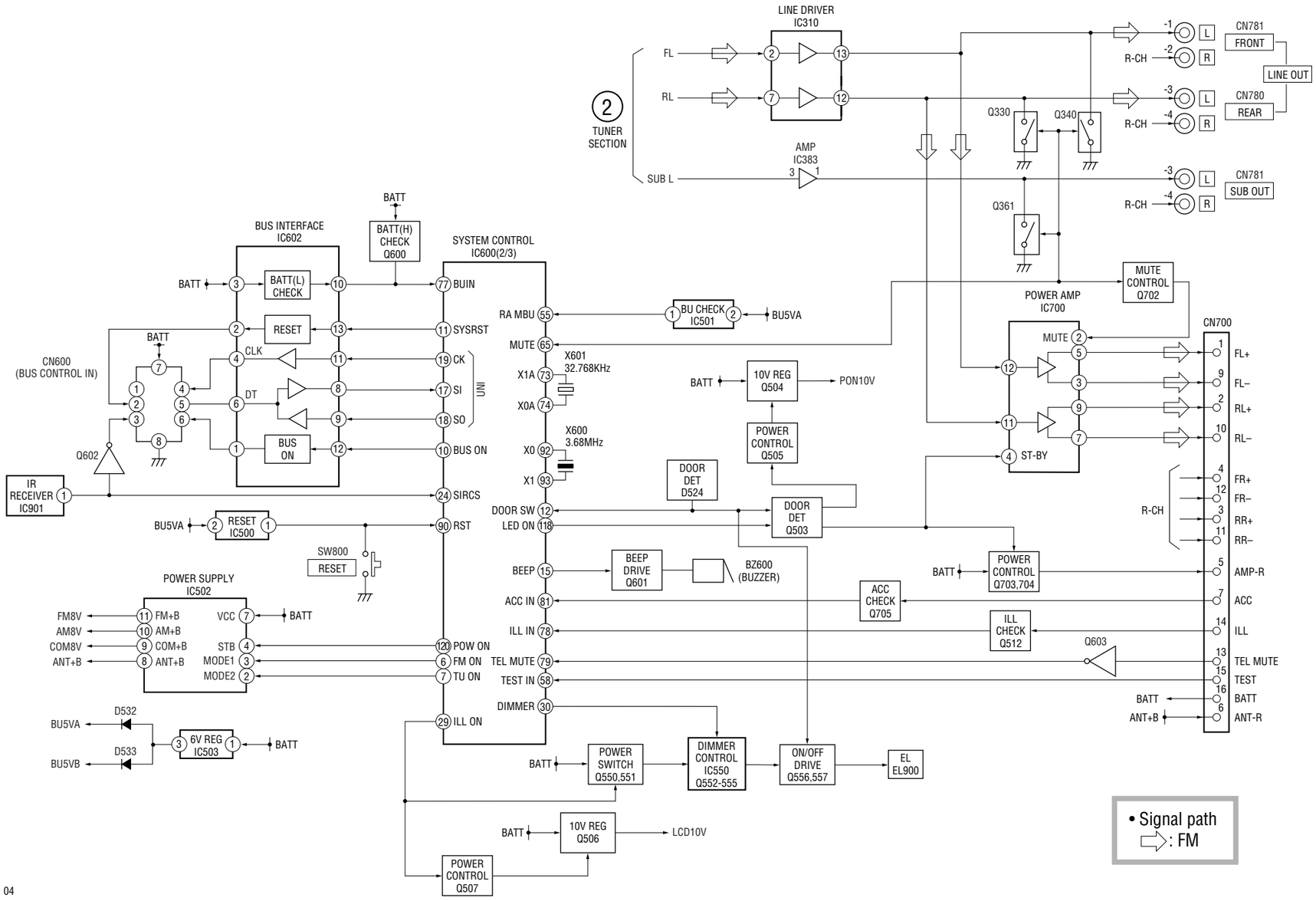
6-1. BLOCK DIAGRAM — TAPE SECTION —



6-2. BLOCK DIAGRAM — TUNER SECTION —



6-3. BLOCK DIAGRAM — MAIN SECTION —



04

6-4. PRINTED WIRING BOARDS — MAIN SECTION —

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D10	E-10	IC310	C-9
D11	E-15	IC320	E-6
D12	E-15	IC350	D-6
D50	H-13	IC383	C-7
D200	G-3	IC410	C-8
D201	E-20	IC500	D-5
D202	E-2	IC501	D-18
D350	E-5	IC502	D-21
D351	E-5	IC503	F-21
D501	I-17	IC550	F-26
D502	I-18	IC600	F-4
D503	I-15	IC602	D-2
D504	I-17	IC650	E-4
D506	H-10	IC700	B-17
D507	E-19		
D508	B-7	LED800	G-24
D509	B-8	LED801	H-24
D510	C-7	LED802	G-24
D512	H-13		
D513	H-10	Q10	E-15
D514	I-10	Q11	E-8
D515	H-13	Q12	G-12
D516	H-13	Q13	H-12
D517	I-8	Q14	F-10
D518	H-13	Q15	E-9
D519	I-8	Q17	D-9
D520	H-20	Q50	G-10
D521	I-15	Q51	H-9
D522	H-13	Q52	G-14
D523	H-5	Q53	G-14
D524	H-4	Q60	H-10
D525	I-8	Q80	G-10
D530	E-2	Q201	E-3
D532	D-21	Q202	F-2
D533	D-20	Q203	F-20
D534	D-21	Q204	F-20
D550	E-26	Q250	G-8
D551	E-26	Q330	B-10
D552	E-27	Q340	B-9
D553	E-26	Q360	D-18
D554	D-27	Q361	B-8
D601	D-2	Q362	D-17
D602	B-21	Q430	B-8
D603	B-21	Q440	B-9
D604	D-2	Q460	D-18
D605	D-2	Q461	B-8
D606	C-2	Q462	D-17
D608	B-21	Q501	H-17
D701	C-5	Q502	I-8
D702	B-5	Q503	H-19
D703	B-5	Q504	I-18
D704	B-5	Q505	H-17
D705	B-6	Q506	I-18
D706	C-18	Q507	I-5
D707	C-18	Q508	I-8
D708	C-18	Q509	I-7
D709	C-21	Q510	H-9
D710	B-20	Q511	H-9
D711	C-15	Q512	E-18
D712	C-19	Q550	G-20
D713	E-19	Q551	G-20
D714	E-20	Q552	E-26
D715	B-4	Q553	E-25
D717	C-6	Q554	E-26
D718	C-3	Q555	E-26
D719	C-3	Q556	D-27
		Q557	E-27
IC10	E-9	Q600	D-2
IC11	D-9	Q601	G-20
IC50	H-9	Q602	D-3
IC51	G-9	Q603	D-4
IC100	H-6	Q700	B-7
IC101	H-7	Q701	C-15
IC201	F-2	Q702	C-6
IC250	F-9	Q703	D-3
IC301	F-7	Q704	D-4
IC302	E-8	Q705	E-19

【MAIN BOARD】(SIDE A)

【MAIN BOARD】(SIDE B)

【INVERTER BOARD】

【SUB BOARD】(SIDE A)

【SUB BOARD】(SIDE B)

C8100Q

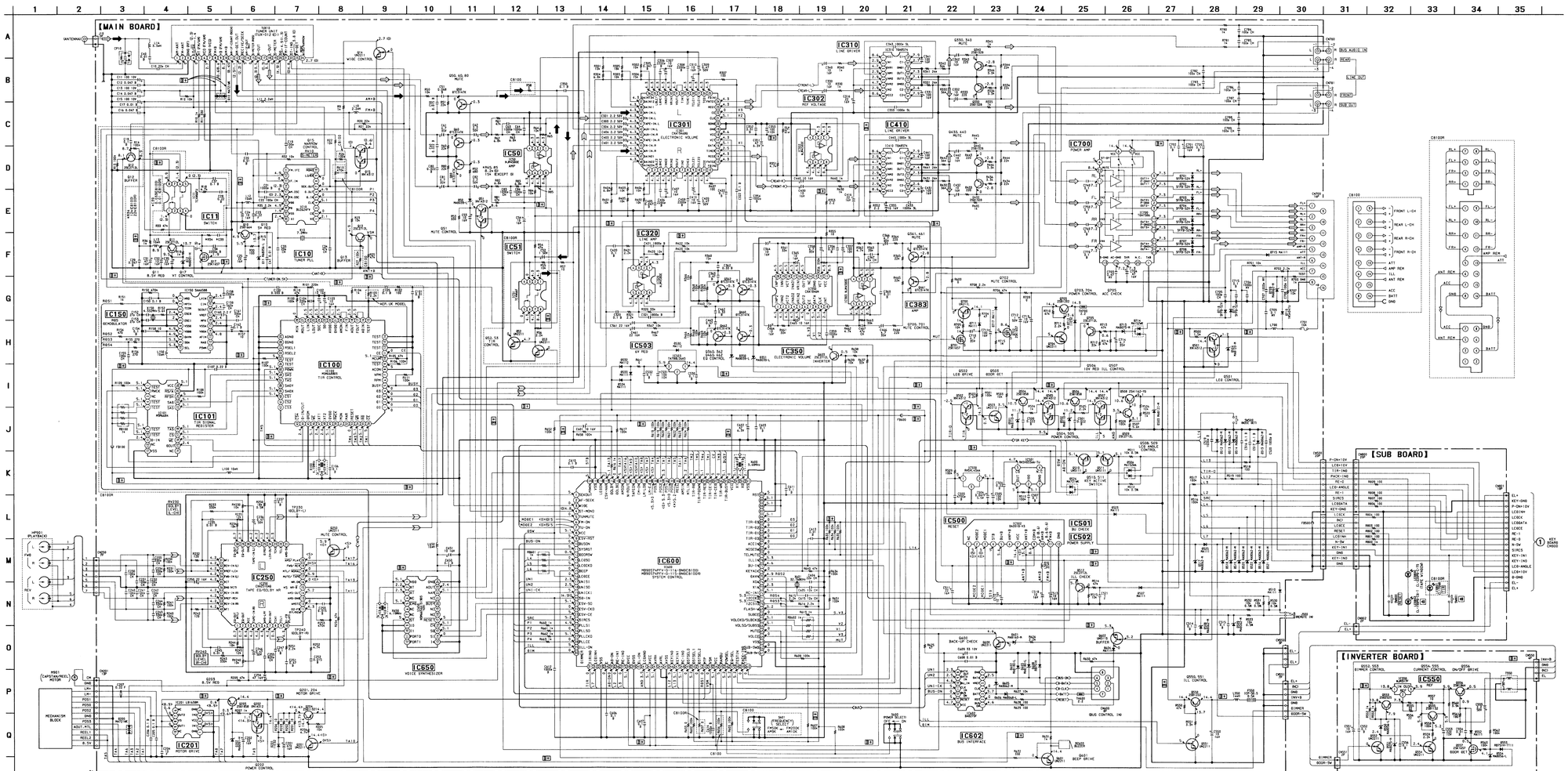
C8100R

MECHANISM BLOCK

Note:
- ⟷: parts extracted from the component side.
- ●: Through hole.
- ▒▒: Pattern from the side which enables seeing.

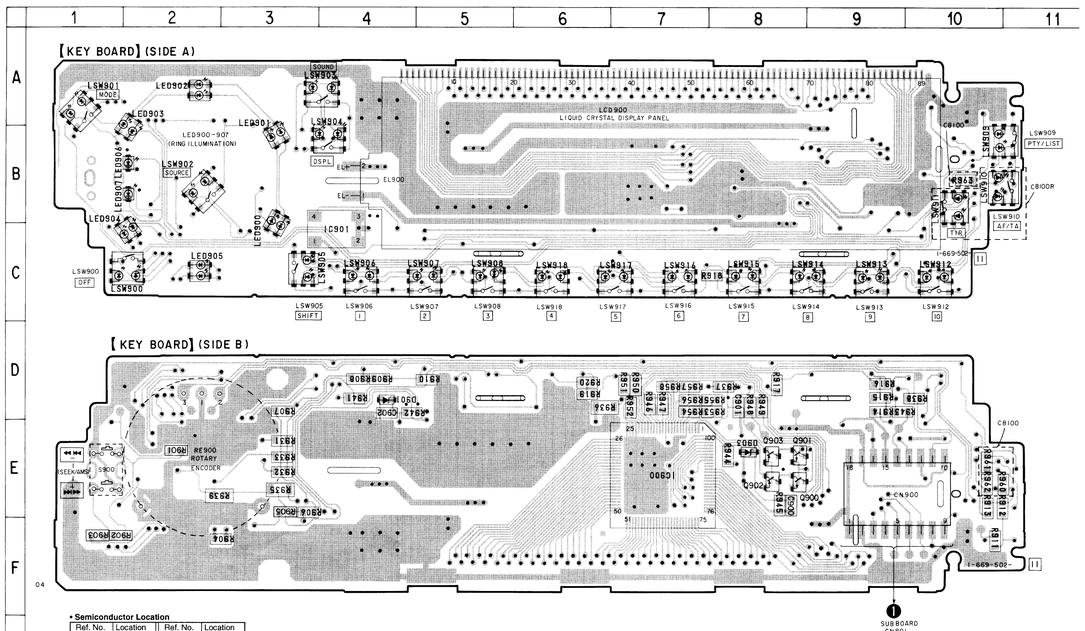
Caution:
Pattern face side: (Side B) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A) Parts on the parts face side seen from the parts face are indicated.

6-5. SCHEMATIC DIAGRAM — MAIN SECTION — • Refer to page 54 for IC Block Diagrams.



Note:
- All capacitors are in µF unless otherwise noted. pF: µF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- [ ] : panel designation.
- [B+] : B+ Line.
- [ ] : adjustment for repair.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : AM (MW)
  < > : PB
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  : FM
  : AM (MW)
  : PB

6-6. PRINTED WIRING BOARD — DISPLAY SECTION —

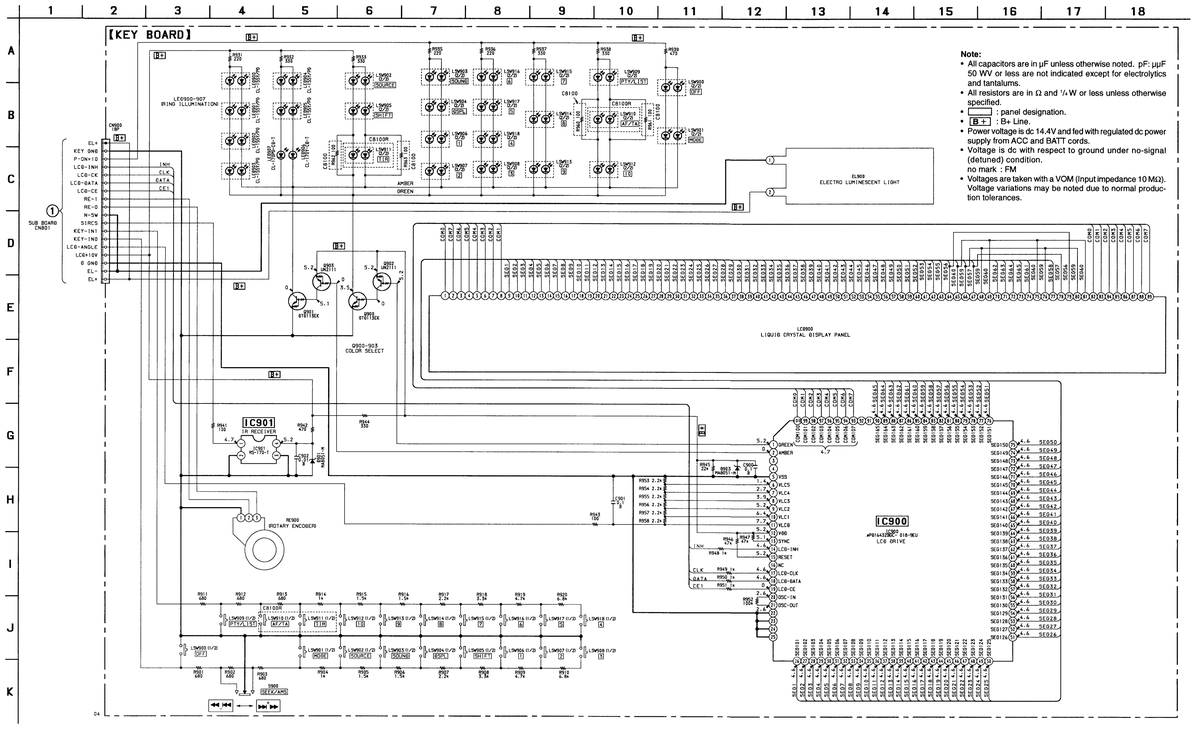


• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D901	D-4	LED904	C-2
D903	E-8	LED905	C-2
		LED906	B-2
IC900	E-7	LED907	B-2
IC901	C-4		
		Q900	E-8
LED900	B-3	Q901	E-8
LED901	B-3	Q902	E-8
LED902	A-2	Q903	E-8
LED903	A-2		

Note:
- ● : Through hole.
- ▨ : Pattern from the side which enables seeing. (The other layers' patterns are not indicated.)

6-7. SCHEMATIC DIAGRAM — DISPLAY SECTION —



Note:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- [ ] : panel designation.
- B+ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltage is dc with respect to ground under no-signal (detuned) condition. no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.

6-8. IC PIN DESCRIPTION

• IC600 MB90574PFV-G-115-BND (SYSTEM CONTROL) (XR-C8100R)
MB90574PFV-G-116-BND (SYSTEM CONTROL) (XR-C8100)

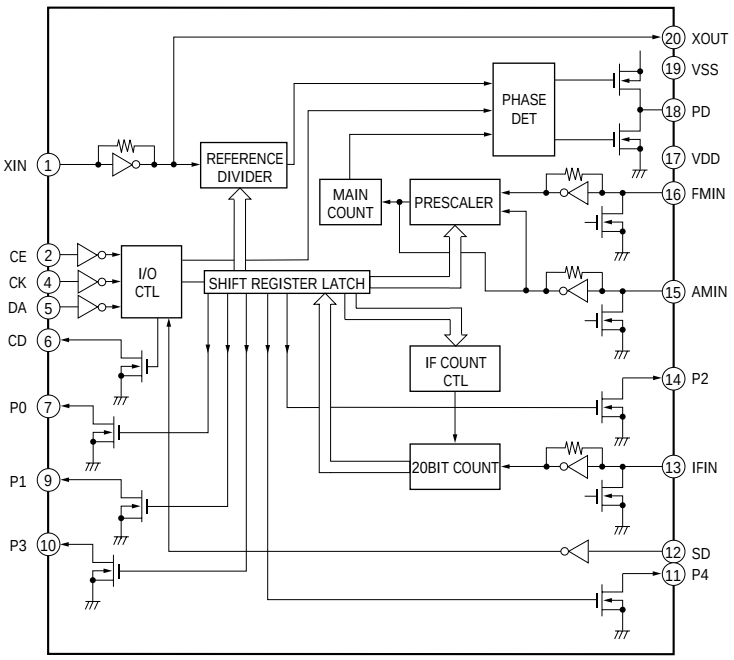
Pin No.	Pin Name	I/O	Pin Description
1	SEKOUT	O	SEEK OUT output
2	AF-SEEK	O	AF SEEK output
3	WIDE	O	WIDE/NARROW select output
4	ST-MONO	I/O	Use a thing both as ST-IND display input and force MONO output.
5	TUNMUTE	O	Tuner mute output
6	FM-ON	O	FM ON output
7	TU-ON	O	Tuner ON output
8	VCC	—	Power supply pin (+5 V)
9	CSV-RST	O	Audio composition IC reset output
10	BUSON	O	Bus ON control output
11	SYSRST	O	System reset output
12	DOORSW	I	Door OPEN/CLOSE detection input
13	LCDSO	O	LCD serial data output
14	LCDCKO	O	LCD serial clock output
15	BEEP	O	BEEP output
16	LCDCE	O	LCD chip enable output
17	UNISI	O	Serial data input
18	UNISO	O	Serial data output
19	UNICKI	I	Serial clock input
20	SD-IN	I	Signal detector input
21	CSV-SO	O	Audio composition serial data output
22	CSV-CKO	O	Audio composition serial clock output
23	CSV-CE	O	Audio composition chip enable output
24	SIRCS	I	Remote commander input
25	PLLSI	I	PLL data input
26	PLLSO	O	PLL data output
27	PLLCKO	O	PLL clock output
28	PLLCE	O	PLL chip enable output
29	ILL-ON	O	Illumination power control output
30	DIMMER	I/O	Dimmer control input/output
31	TIRIND	O	TIR indicator control output (C8100R)
32	LCDINH	O	LCD blank display control output
33	VSS	—	GND
34	C	—	Power stabilization capacitor pin
35	AD-ON	O	Power control output of A/D conversion.
36, 37	RE-IN0, 1	I	Rotary encoder input 0, 1
38	DVCC	—	D/A converter VREF input
39	DVSS	—	GND of D/A converter.
40	EL-ON	O	Not used.
41	LCDANG	O	LCD view angle alignment output
42	AVCC	—	Analog power supply pin (+5 V)
43	AVRH	—	A/D converter VREF+ input
44	AVRL	—	A/D converter VREF- input
45	AVSS	—	Analog GND
46, 47	KEYIN0, 1	I	Key input 0, 1
48	RC-IN0	I	Rotary commander input 0
49	DSTSEL0	I	Destination select input 0 (Fixed at “L” in this set.)
50	DSTSEL1	I	Destination select input 1 (Fixed at “H” in this set.)
51	DSTSEL2	I	Destination select input 2 (Fixed at “L” in this set.) (C8100R) Frequency select input (C8100)

Pin No.	Pin Name	I/O	Pin Description
52	MTP	I	Tuner multi-pass input
53	VSM	I	S-Meter voltage detection input
54	VCC	—	Power supply pin (+5 V)
55	RAMBU	I	RAM reset detection input
56	POWSEL	I	Power select initial setting input
57	EQ-SEL	I	Equalizer connection with/without detection initial input
58	TESTIN	I	Test mode setting detection input
59	PACK-IND	O	Door indicator output
60	TIRPLAY	O	Audio line select control output at TIR playback. (C8100R)
61, 62	SUB-SW1, 0	O	Simple SUB WOOFER control output 1, 0
63	VSS	—	GND
64	VOLCE	O	Electric volume serial chip enable output
65	MUTE	O	System mute control output
66	VOLSO/SUBSO	O	Main/Sub volume serial data output
67	VOLCKO/SUBCKO	O	Main/Sub volume serial clock output
68	SUBCE	O	Sub volume serial chip enable output
69	FLASH-W	I	Flash write in mode detection input
70	I2CSIO	I/O	RDS serial data input/output
71	I2CCKO	O	RDS serial clock output
72	RC-IN1	I	Rotary commander input
73	X1A	—	Low speed oscillation input (32.768 kHz)
74	X0A	—	Low speed oscillation input (32.768 kHz)
75	DAVN	I	RDS IC data taking in detection input
76	KEYACK	I	Key input acknowledge
77	BU-IN	I	Back-up power detection input
78	ILLIN	I	Illumination line detection input
79	TELMUTE	I	Telephone mute detection input
80	NOSESW	I	Front panel detachable detection input
81	ACCIN	I	Accessory power detection input
82 – 85	TIR-D0 – D3	I/O	TIR IC command input/output 0 – 3 (C8100R)
86	(VCC)	—	Connect to power supply pin.
87	(VSS)	—	Connect to GND.
88, 89	(VCC)	—	Connect to power supply pin.
90	RST	I	Microcomputer reset input
91	VSS	—	GND
92	X0	—	High speed oscillation input (3.68 MHz)
93	X1	—	High speed oscillation input (3.68 MHz)
94	VCC	—	Power supply pin (+5 V)
95	TIR-BUSY	I	TIR IC BUSY output monitor pin (C8100R)
96	TIR-WR	O	TIR IC data write in pulse output (C8100R)
97, 98	TIR-CE0, 1	O	TIR IC chip enable output (C8100R)
99	TIR-RES	O	TIR IC reset/power down output (C8100R)
100	TIR-PDWN	O	TIR IC power down output (C8100R)
101	TIR-RD	O	TIR IC data read in pulse output (C8100R)
102	MTLIN	I	Auto METAL detection input
103	AMSTIN	I	Tape AMS music detection input
104	REEL	I	Tape reel table rotation detection input
105	POS0	I	Tape position detection input 0
106	POS1	I	Tape position detection input 1
107	POS2	I	Tape position detection input 2
108	POS3	I	Tape position detection input 3
109	LM-EJ	O	Tape loading motor control output (Eject direction)
110	LM-LOD	O	Tape loading motor control output (Loading direction)

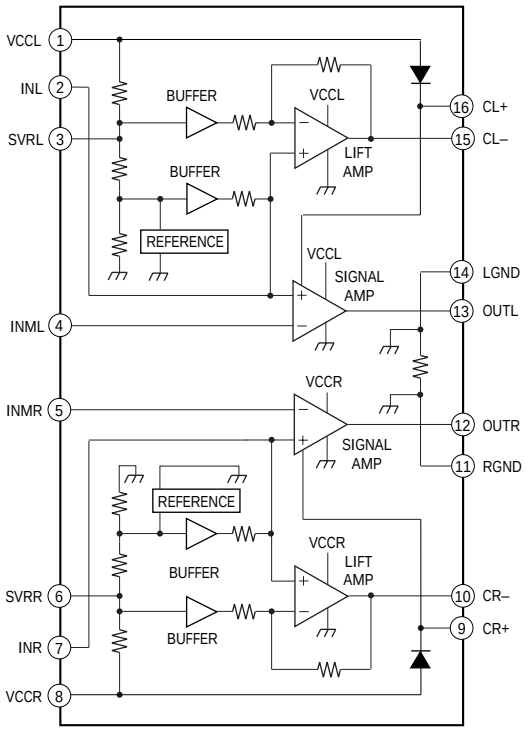
Pin No.	Pin Name	I/O	Pin Description
111	CM-ON	O	Tape capstan motor control output
112	TAPEON	O	Tape power control output
113	N-ROUT	O	Tape forward/reverse detection output
114	AMSON	O	Tape AMS control output
115	DOLBC	O	Tape DOLBY B/C select control output
116	DOLBY	O	Tape DOLBY control output
117	CSV-NAR	I	Space condition indicate signal input for voice synthesizer IC.
118	LEDON	O	Front panel LED control output
119	VSS	—	GND
120	POWON	O	System power control output

• IC Block Diagrams

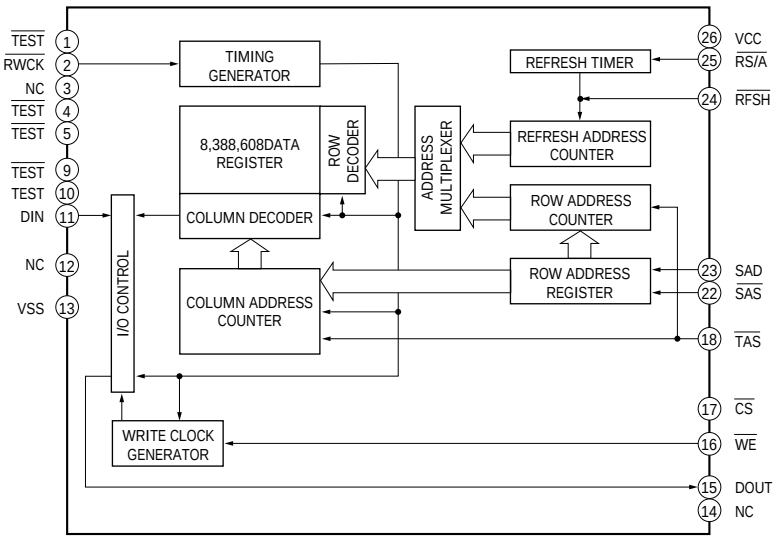
IC10 BU2624FV



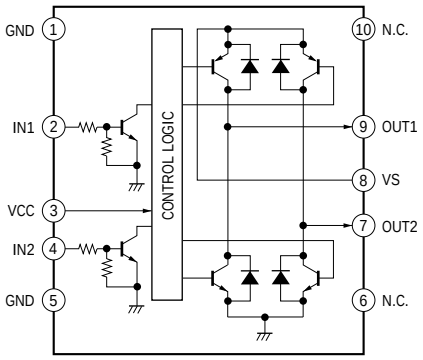
IC310, 410 TDA8574



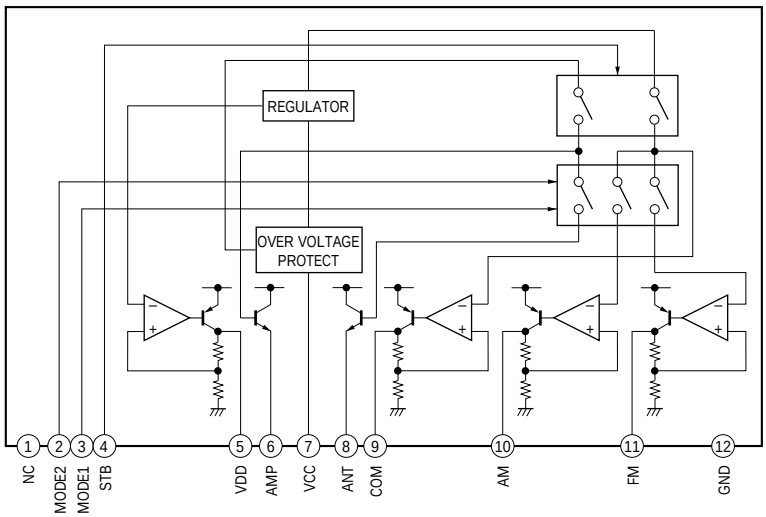
IC101 MSM6684



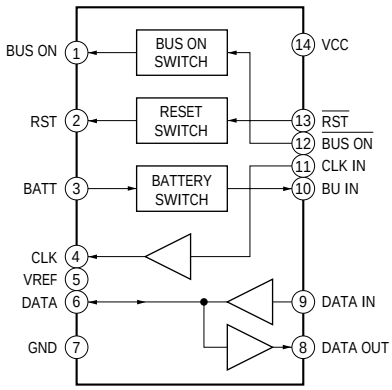
IC201 LB1638M



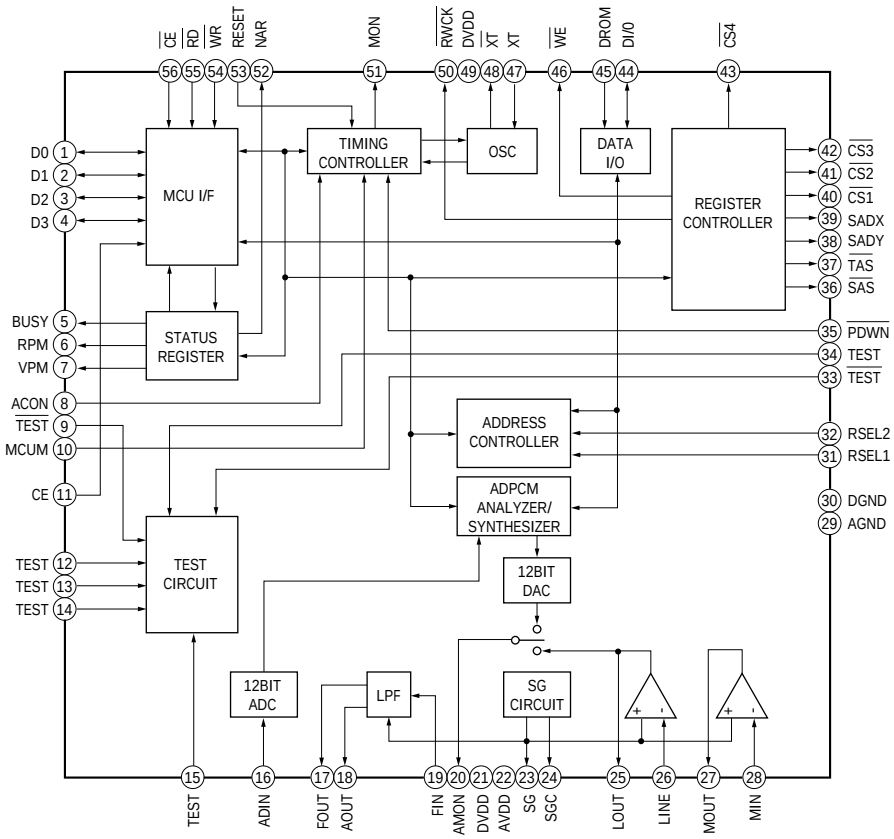
IC500 BA3918-V3



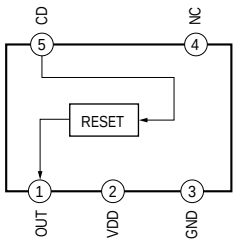
IC602 BA8270F



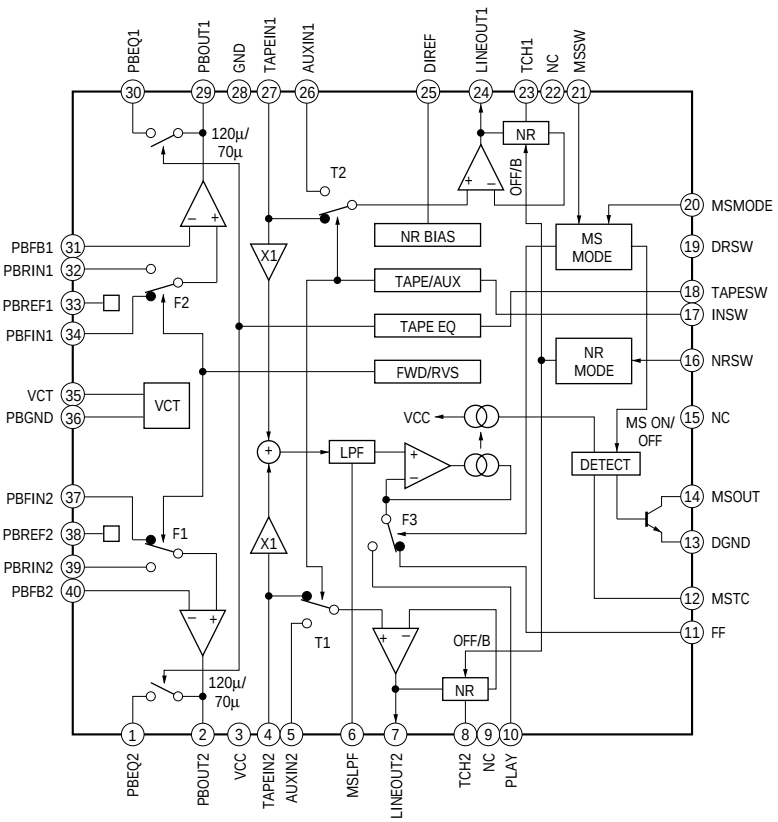
IC100 MSM6688GS



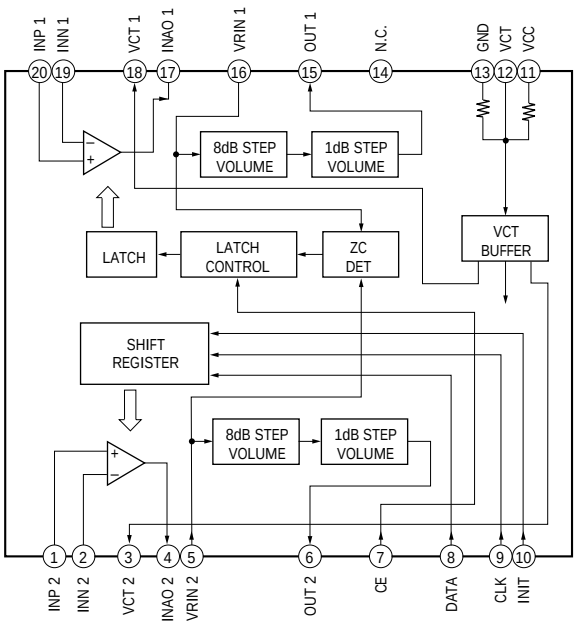
IC501 RN5VD33A-TU



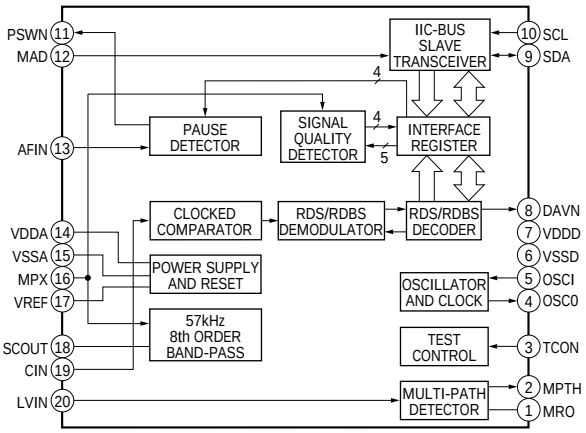
IC250 CXA2510AQ



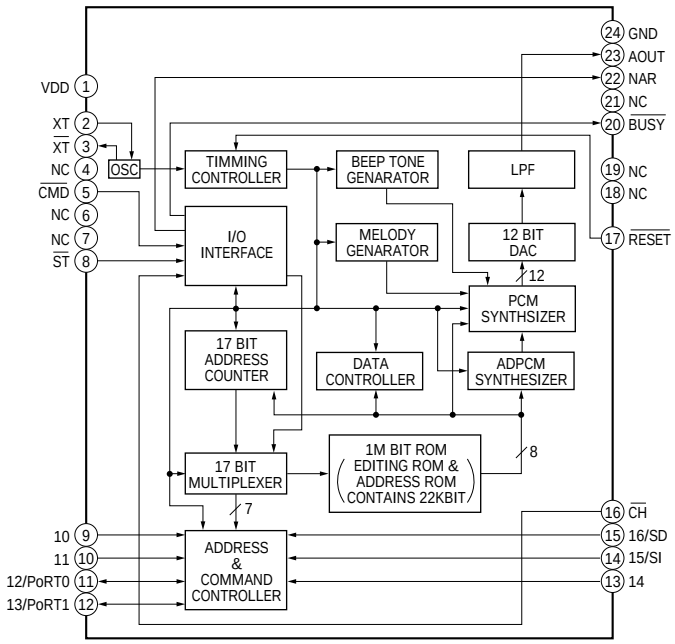
IC350 CXA1846N



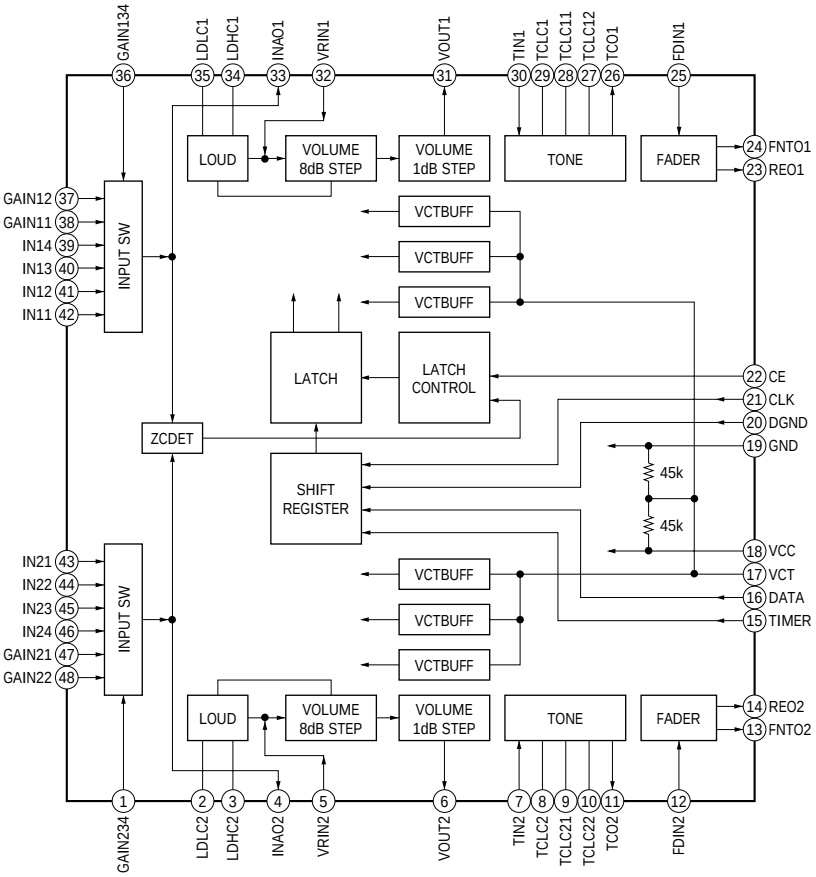
IC150 SAA6588



IC650 MSM6654A-519GS



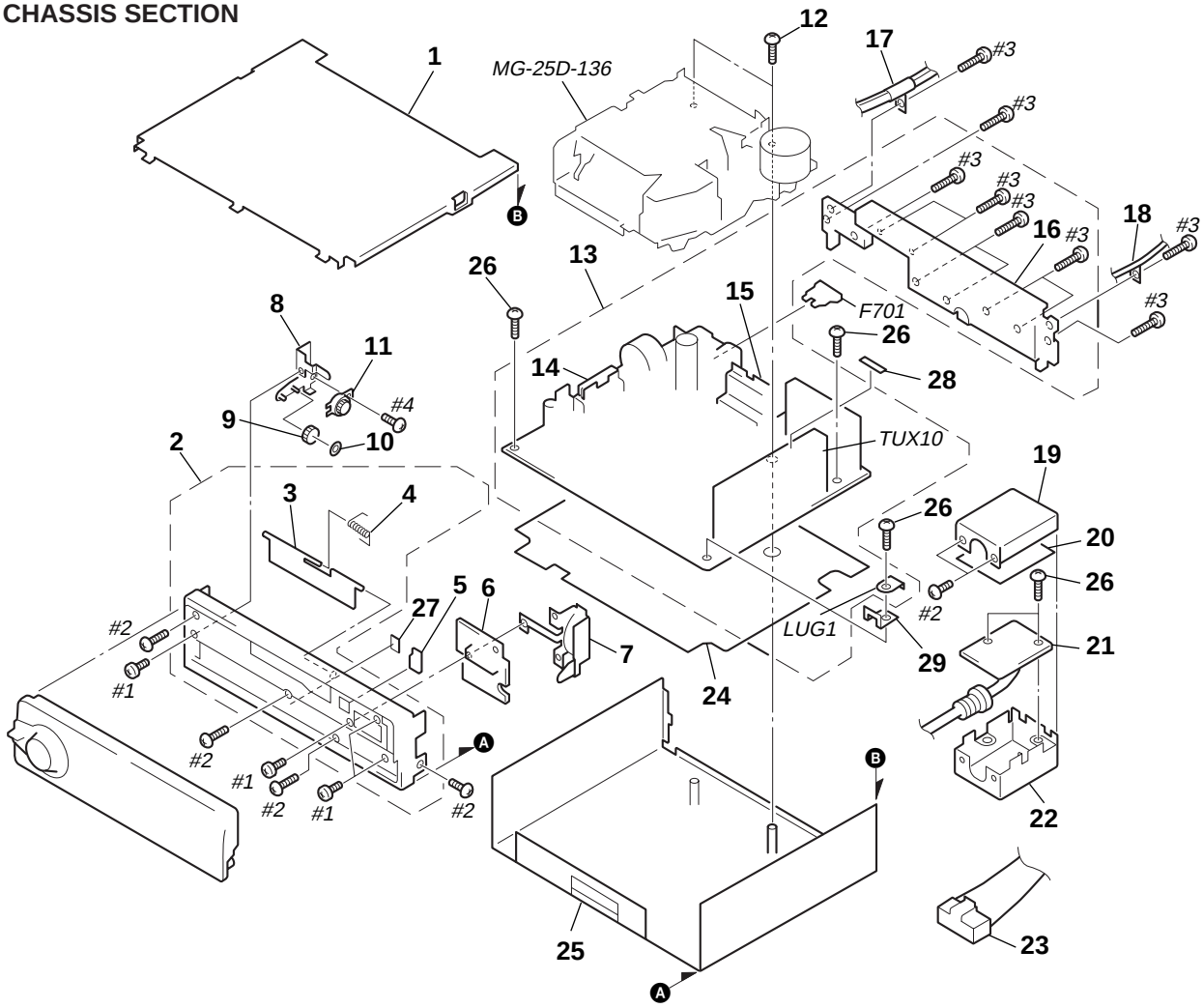
IC301 CXA1946BQ



SECTION 7
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation
  G : German model
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Accessories and packing materials and hardware (# mark) list are given in the last of this parts list.

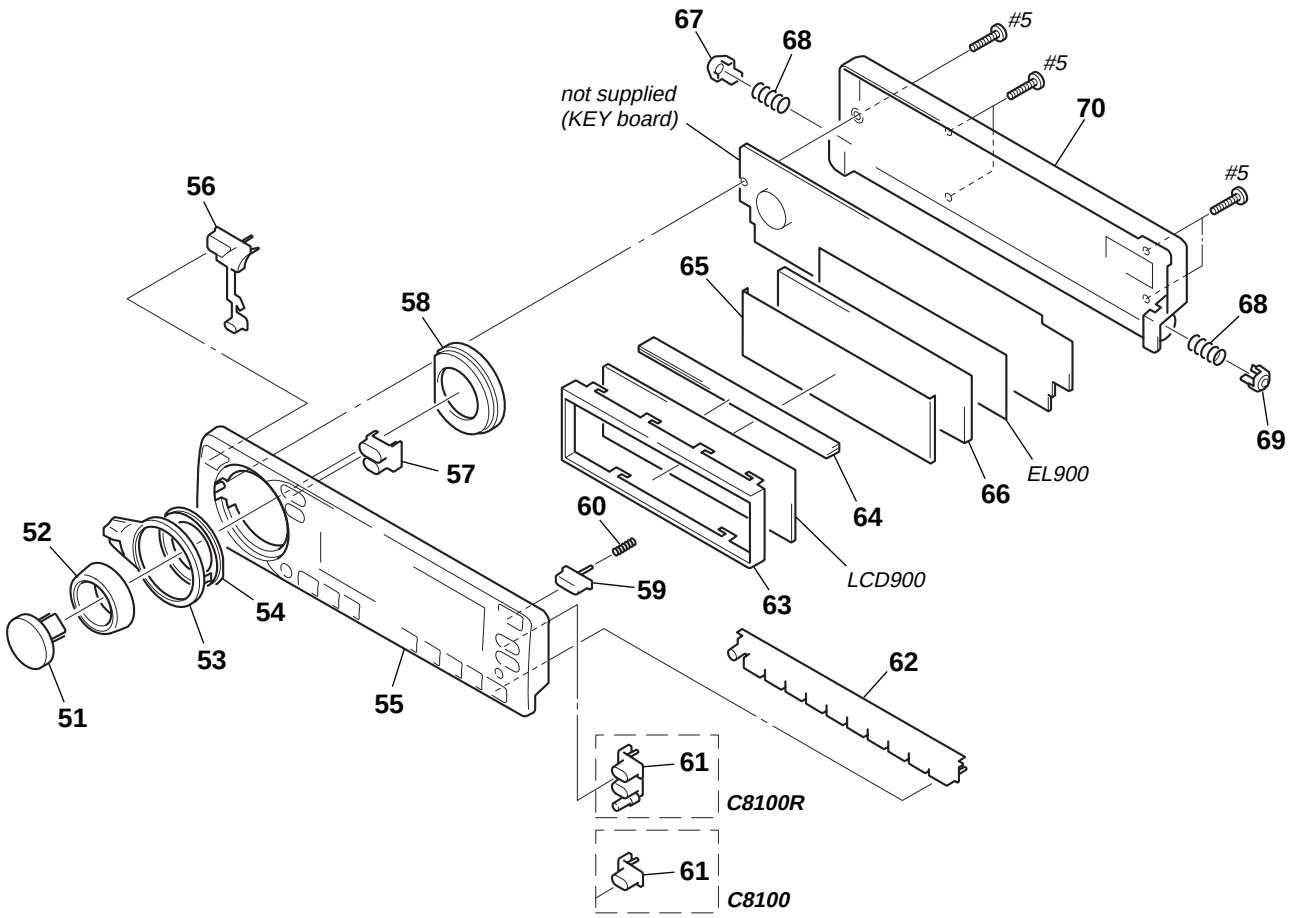
7-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
* 1	3-022-316-01	COVER	
2	X-3375-092-1	PANEL ASSY, SUB (C8100)	
2	X-3375-093-1	PANEL ASSY, SUB (C8100R)	
3	3-922-165-92	DOOR, CASSETTE	
4	3-935-003-01	SPRING (C DOOR), TORSION	
5	3-022-338-01	BUTTON (EJECT)	
* 6	1-669-656-11	SUB BOARD	
7	X-3375-068-1	LOCK ASSY	
8	X-3375-066-1	BRACKET (GEAR) ASSY	
9	3-011-170-01	GEAR (HOLDER)	
10	3-341-752-11	WASHER, POLYETHYLENE	
11	3-953-235-01	DAMPER, OIL	
12	3-919-171-01	SCREW (2.6X6) (C TIGHT)	
* 13	A-3313-644-A	MAIN BOARD, COMPLETE (AEP,UK)	
* 13	A-3313-652-A	MAIN BOARD, COMPLETE (C8100)	
* 13	A-3313-656-A	MAIN BOARD, COMPLETE (G)	
* 14	3-011-078-01	BRACKET (POWER IC)	
* 15	3-022-317-01	BRACKET (AMP)	
* 16	3-022-306-01	HEAT SINK	

Ref. No.	Part No.	Description	Remark
17	1-783-495-11	CORD (WITH CONNECTOR) (INVERTER)	
18	1-777-246-11	CORD (WITH CONNECTOR) (ANTENNA)	
19	3-937-282-01	CASE (UPPER)	
* 20	3-938-138-01	SHEET (E)	
* 21	A-3313-646-A	INVERTER BOARD, COMPLETE	
22	3-937-812-01	CASE (LOWER)	
23	1-776-207-71	CORD (WITH CONNECTOR) (POWER) (C8100)	
23	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER)	(C8100R)
* 24	3-022-307-01	INSULATED PLATE (C8100R)	
* 24	3-022-312-01	INSULATED PLATE (C8100)	
* 25	X-3375-081-1	CHASSIS ASSY	
26	3-915-923-01	SCREW, GROUND POINT	
27	3-015-565-31	SPACER (SW)	
* 28	3-355-209-01	PLATE (B), GROUND	
* 29	3-023-774-01	PLATE (LOCK), GROUND	
F701	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
* LUG1	1-537-738-21	TERMINAL, EARTH	
TUX10	A-3282-045-A	TUNER UNIT (TUX-012(E))	

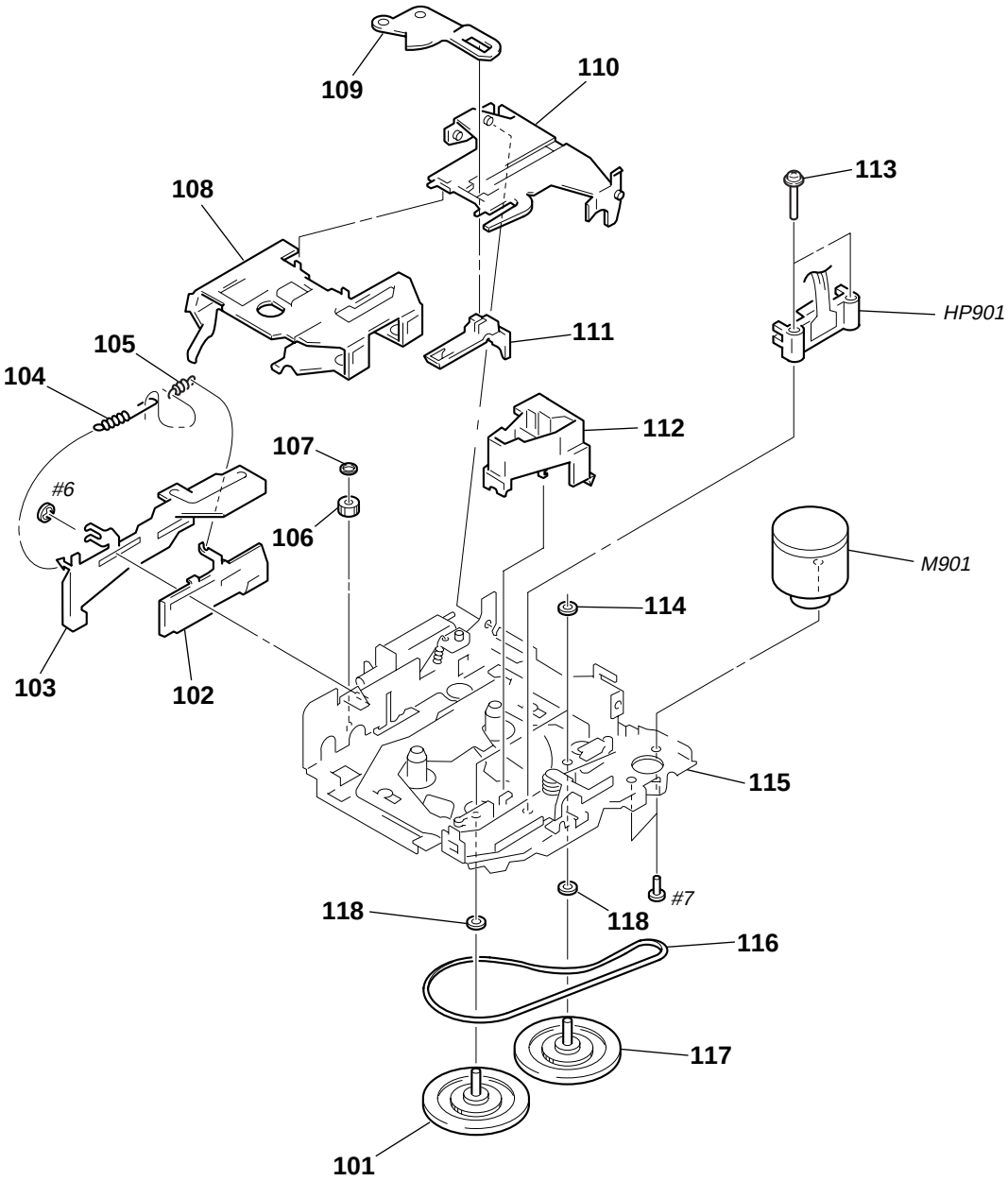
7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-022-329-01	BUTTON (SOURCE)	
52	3-022-322-01	KNOB	
53	3-022-323-01	LEVER (SHUTTLE)	
54	3-022-324-01	PLATE (SHUTTLE), LIGHT GUIDE	
55	X-3375-681-1	PANEL SUB ASSY, FRONT (C8100)	
55	X-3375-682-1	PANEL SUB ASSY, FRONT (C8100R)	
56	3-022-330-01	BUTTON (MODE)	
57	3-022-331-01	BUTTON (SOUND)	
58	3-022-325-01	PLATE (RING), LIGHT GUIDE	
59	3-022-333-01	BUTTON (OPEN)	
60	3-932-225-01	SPRING (OPEN)	
61	3-022-308-01	BUTTON (PTY) (C8100R)	
61	3-022-334-01	BUTTON (LIST) (C8100)	

Ref. No.	Part No.	Description	Remark
62	3-022-332-01	BUTTON (10 KEY)	
* 63	3-022-327-01	PLATE (LCD), GROUND	
64	1-694-414-11	CONDUCTOR BOARD, CONNECTION	
* 65	3-022-328-01	ILLUMINATOR (LCD)	
* 66	3-022-326-01	PLATE (LCD), LIGHT GUIDE	
67	3-010-999-01	BEARING (L)	
68	3-010-998-01	SPRING (BEARING)	
69	3-011-000-01	BEARING (R)	
70	3-022-319-01	PANEL, FRONT BACK	
EL900	1-517-766-11	LIGHT, ELECTRO LUMINESCENT	
LCD900	1-803-107-11	DISPLAY PANEL, LIQUID CRYSTAL	

7-3. MECHANISM DECK SECTION (MG-25D-136)



Ref. No.	Part No.	Description	Remark
101	A-3291-667-A	CLUTCH (FR) ASSY	
102	3-019-130-01	LEVER (LDG-A)	
103	3-020-522-03	LEVER (LDG-B)	
104	3-020-539-01	SPRING (LD-1), TENSION	
105	3-020-540-01	SPRING (LD-2), TENSION	
106	3-020-542-01	GEAR (LOADING FT)	
107	3-341-753-11	WASHER, POLYETHYLENE	
108	3-020-533-01	HOUSING	
109	3-020-532-01	ARM (SUCTION)	
110	3-020-534-01	HANGER	
111	3-933-346-01	CATCHER	
112	3-933-344-01	GUIDE (C)	
113	3-014-798-01	SCREW (HEAD), SPECIAL	
114	3-364-151-01	WASHER	
115	X-3375-625-1	CHASSIS (SV) ASSY (D)	
116	3-017-302-01	BELT (25)	
117	3-936-853-01	FLYWHEEL (F)	
118	3-701-437-21	WASHER	
HP901	1-500-157-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	

INVERTER **KEY**

SECTION 8
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the par ts list ma y be diff erent from the par ts specified in the diag rams or the components used on the set.
- -XX and -X mean standardized parts, so the y ma y ha ve some diff erence from the original one.
- RESIST ORS
  All resistors are in ohms.
  METAL:Metal-film resistor .
  METAL OXIDE: Metal o xide-film resistor .
  F:nonflammable
- Items mar ked "*"are not stoc ked since the y are seldom required f or routine ser vice. Some delay should be anticipated when ordering these items.
- SEMICONDUCT ORS
  In each case , u : µ, for e xample:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

When indicating parts by reference number , please include the board.

- Abbreviation
  G : German model

Ref. No.	Part No.	Description			Remark
*	A-3313-646-A	INVERTER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C551	1-126-157-11	ELECT	10uF	20%	16V
C552	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C553	1-126-923-11	ELECT	220uF	20%	10V
C554	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C555	1-124-257-00	ELECT	2.2uF	20%	50V
C556	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
		< CONNECTOR >			
* CN550	1-564-507-11	PLUG, CONNECTOR 4P			
CN551	1-564-505-11	PLUG, CONNECTOR 2P			
		< DIODE >			
D550	8-719-422-49	DIODE MA8056-L			
D551	8-719-422-80	DIODE MA8075-H-TX			
D552	8-719-404-49	DIODE MA111			
D553	8-719-033-43	DIODE RB751H			
D554	8-719-422-49	DIODE MA8056-L			
		< IC >			
IC550	8-759-495-75	IC NJM317F			
		< TRANSISTOR >			
Q552	8-729-421-22	TRANSISTOR UN2211			
Q553	8-729-026-68	TRANSISTOR 2SD2525(TP)			
Q554	8-729-421-22	TRANSISTOR UN2211			
Q555	8-729-903-46	TRANSISTOR 2SB1132-P			
Q556	8-729-016-11	TRANSISTOR 2SD1507M			
Q557	8-729-021-94	FET 2SK1657-T1B			
		< RESISTOR >			
R552	1-216-198-00	RES,CHIP	1K	5%	1/8W
R553	1-216-198-00	RES,CHIP	1K	5%	1/8W
R555	1-216-158-00	RES,CHIP	22	5%	1/8W
R556	1-216-158-00	RES,CHIP	22	5%	1/8W
R557	1-216-001-00	METAL CHIP	10	5%	1/10W
R558	1-216-097-00	RES,CHIP	100K	5%	1/10W
R559	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R560	1-216-063-00	RES,CHIP	3.9K	5%	1/10W
R561	1-216-031-00	METAL CHIP	180	5%	1/10W
R562	1-216-097-00	RES,CHIP	100K	5%	1/10W
R563	1-216-097-00	RES,CHIP	100K	5%	1/10W
		< TRANSFORMER >			
T550	1-431-831-11	TRANSFORMER, OSCILLATION (EL)			
**********					
		KEY BOARD			
		**********			
	1-694-414-11	CONDUCTOR BOARD, CONNECTION			
*	3-022-326-01	PLATE (LCD), LIGHT GUIDE			
*	3-022-327-01	PLATE (LCD), GROUND			
*	3-022-328-01	ILLUMINATOR (LCD)			
		< CAPACITOR >			
C900	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C901	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C902	1-164-232-11	CERAMIC CHIP	0.01uF		50V
		< CONNECTOR >			
CN900	1-778-183-11	PLUG, CONNECTOR 18P			
		< DIODE >			
D901	8-719-420-90	DIODE MA8051-M			
D903	8-719-420-90	DIODE MA8051-M			
		< ELECTRO LUMINESCENT LIGHT >			
EL900	1-517-766-11	LIGHT, ELECTRO LUMINESCENT			
		< IC >			
IC900	8-759-496-75	IC uPD16432BGC-018-9EU			
IC901	8-749-012-25	IC RS-170-TU			
		< LIQUID CRYSTAL DISPLAY >			
LCD900	1-803-107-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< DIODE >			
LED900	8-719-987-45	LED CL-155Y/PG-CD			
LED901	8-719-987-45	LED CL-155Y/PG-CD			
LED902	8-719-987-45	LED CL-155Y/PG-CD			
LED903	8-719-987-45	LED CL-155Y/PG-CD			
LED904	8-719-987-45	LED CL-155Y/PG-CD			
LED905	8-719-987-45	LED CL-155Y/PG-CD			
LED906	8-719-033-13	LED CL-170Y-CD-T			

Ref. No.	Part No.	Description			Remark
LED907	8-719-033-14	LED CL-170PG-CD-T			
		< SWITCH >			
LSW900	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (OFF)			
LSW901	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (MODE)			
LSW902	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (SOURCE)			
LSW903	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (SOUND)			
LSW904	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (DSPL)			
LSW905	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (SHIFT)			
LSW906	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (1)			
LSW907	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (2)			
LSW908	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (3)			
LSW909	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (PTY/LIST)			
LSW910	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (AF/TA)			(C8100R)
LSW911	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (TIR)			(C8100R)
LSW912	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (10)			
LSW913	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (9)			
LSW914	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (8)			
LSW915	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (7)			
LSW916	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (6)			
LSW917	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (5)			
LSW918	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (4)			
		< TRANSISTOR >			
Q900	8-729-904-66	TRANSISTOR DTD113EK			
Q901	8-729-904-66	TRANSISTOR DTD113EK			
Q902	8-729-424-08	TRANSISTOR UN2111			
Q903	8-729-424-08	TRANSISTOR UN2111			
		< RESISTOR >			
R901	1-216-045-00	METAL CHIP	680	5%	1/10W
R902	1-216-045-00	METAL CHIP	680	5%	1/10W
R903	1-216-045-00	METAL CHIP	680	5%	1/10W
R904	1-216-049-11	RES,CHIP	1K	5%	1/10W
R905	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R906	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R907	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R908	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R909	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R910	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R911	1-216-045-00	METAL CHIP	680	5%	1/10W
R912	1-216-045-00	METAL CHIP	680	5%	1/10W
R913	1-216-045-00	METAL CHIP	680	5%	1/10W
R914	1-216-049-11	RES,CHIP	1K	5%	1/10W
R915	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R916	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R917	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R918	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R919	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R920	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R931	1-216-033-00	METAL CHIP	220	5%	1/10W
R932	1-216-037-00	METAL CHIP	330	5%	1/10W
R933	1-216-037-00	METAL CHIP	330	5%	1/10W
R935	1-216-182-00	RES,CHIP	220	5%	1/8W
R936	1-216-182-00	RES,CHIP	220	5%	1/8W
R937	1-216-037-00	METAL CHIP	330	5%	1/10W
R938	1-216-037-00	METAL CHIP	330	5%	1/10W
R939	1-216-190-00	RES,CHIP	470	5%	1/8W
R941	1-216-025-00	RES,CHIP	100	5%	1/10W
R942	1-216-041-00	METAL CHIP	470	5%	1/10W
R943	1-216-025-00	RES,CHIP	100	5%	1/10W
R944	1-216-037-00	METAL CHIP	330	5%	1/10W
R945	1-216-081-00	METAL CHIP	22K	5%	1/10W
R946	1-216-089-00	RES,CHIP	47K	5%	1/10W
R947	1-216-089-00	RES,CHIP	47K	5%	1/10W
R948	1-216-049-11	RES,CHIP	1K	5%	1/10W
R949	1-216-049-11	RES,CHIP	1K	5%	1/10W
R950	1-216-049-11	RES,CHIP	1K	5%	1/10W
R951	1-216-049-11	RES,CHIP	1K	5%	1/10W
R952	1-216-097-00	RES,CHIP	100K	5%	1/10W
R953	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R954	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R955	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R956	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R957	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R958	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R960	1-216-025-00	RES,CHIP	100	5%	1/10W (C8100)
R961	1-216-025-00	RES,CHIP	100	5%	1/10W (C8100)
R962	1-216-025-00	RES,CHIP	100	5%	1/10W (C8100)
R963	1-216-025-00	RES,CHIP	100	5%	1/10W (C8100)
		< ROTARY ENCODER >			
RE900	1-475-014-11	ENCODER, ROTARY			
		< SWITCH >			
S900	1-771-290-11	SWITCH, SLIDE (SEEK/AMS)			
**********					
*	A-3313-644-A	MAIN BOARD, COMPLETE (AEP,UK)			
*	A-3313-652-A	MAIN BOARD, COMPLETE (C8100)			
*	A-3313-656-A	MAIN BOARD, COMPLETE (G)			
		**********			
*	3-011-078-01	BRACKET (POWER IC)			
*	3-022-306-01	HEAT SINK			
*	3-022-317-01	BRACKET (AMP)			
	7-685-794-09	SCREW +PTT 2.6X10 (S)			
		< BUZZER >			
BZ600	1-504-920-11	BUZZER			

MAIN

Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C10	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C11	1-126-933-11	ELECT	100uF	20%	10V
C12	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C13	1-126-933-11	ELECT	100uF	20%	10V
C14	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C15	1-126-933-11	ELECT	100uF	20%	10V
C16	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C17	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C18	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V (C8100R)
C19	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C20	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C21	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C22	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C23	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C24	1-126-157-11	ELECT	10uF	20%	16V
C25	1-124-234-00	ELECT	22uF	20%	16V
C28	1-164-222-11	CERAMIC CHIP	0.22uF		25V (C8100R)
C29	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C31	1-124-589-11	ELECT	47uF	20%	16V
C32	1-126-157-11	ELECT	10uF	20%	16V
C33	1-163-234-11	CERAMIC CHIP	20PF	5%	50V
C34	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C35	1-124-234-00	ELECT	22uF	20%	16V
C37	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V (C8100R)
C38	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C39	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V (C8100)
C39	1-164-232-11	CERAMIC CHIP	0.01uF		50V (C8100R)
C40	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C41	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C50	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V
C51	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C52	1-126-301-11	ELECT	1uF	20%	50V (C8100R)
C53	1-126-157-11	ELECT	10uF	20%	16V
C54	1-126-157-11	ELECT	10uF	20%	16V
C60	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C61	1-126-163-11	ELECT	4.7uF	20%	50V
C62	1-124-257-00	ELECT	2.2uF	20%	50V
C63	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C64	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C80	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C81	1-126-163-11	ELECT	4.7uF	20%	50V
C82	1-124-257-00	ELECT	2.2uF	20%	50V
C83	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C84	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C100	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V (C8100R)
C101	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V (C8100R)
C102	1-126-157-11	ELECT	10uF	20%	16V (C8100R)
C103	1-126-157-11	ELECT	10uF	20%	16V (C8100R)
C104	1-162-957-11	CERAMIC CHIP	220PF	5%	50V (C8100R)
C105	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (C8100R)
C106	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V (C8100R)
C107	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V (C8100R)
C150	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (C8100R)
C152	1-163-237-11	CERAMIC CHIP	27PF	5%	50V (C8100R)
C153	1-163-237-11	CERAMIC CHIP	27PF	5%	50V (C8100R)
C154	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V (C8100R)
C155	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (C8100R)
C158	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V (C8100R)
C159	1-163-135-00	CERAMIC CHIP	560PF	5%	50V (C8100R)
C160	1-164-505-11	CERAMIC CHIP	2.2uF		16V (C8100R)
C161	1-163-263-11	CERAMIC CHIP	330PF	5%	50V (C8100R)
C162	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V (C8100R)
C201	1-126-935-11	ELECT	470uF	20%	16V
C202	1-124-234-00	ELECT	22uF	20%	16V
C204	1-117-370-11	CERAMIC CHIP	10uF		10V
C205	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C206	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C207	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C230	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C231	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C232	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C233	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C234	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C235	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C236	1-126-159-11	ELECT	0.47uF	20%	50V
C237	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C240	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C241	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C242	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C243	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C244	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C245	1-164-232-11	CERAMIC CHIP	0.01uF		50V

Ref. No.	Part No.	Description			Remark
C246	1-126-159-11	ELECT	0.47uF	20%	50V
C247	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C250	1-124-234-00	ELECT	22uF	20%	16V
C251	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C252	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V
C253	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V
C254	1-124-589-11	ELECT	47uF	20%	16V
C255	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C301	1-124-257-00	ELECT	2.2uF	20%	50V
C303	1-124-257-00	ELECT	2.2uF	20%	50V
C304	1-124-257-00	ELECT	2.2uF	20%	50V
C305	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C306	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C307	1-126-157-11	ELECT	10uF	20%	16V
C308	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C309	1-126-159-11	ELECT	0.47uF	20%	50V
C310	1-126-157-11	ELECT	10uF	20%	16V
C316	1-124-234-00	ELECT	22uF	20%	16V
C320	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C321	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C322	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C330	1-126-157-11	ELECT	10uF	20%	16V
C331	1-115-175-11	ELECT	100uF	20%	16V
C332	1-126-157-11	ELECT	10uF	20%	16V
C333	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C340	1-126-157-11	ELECT	10uF	20%	16V
C341	1-115-175-11	ELECT	100uF	20%	16V
C342	1-126-157-11	ELECT	10uF	20%	16V
C343	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C350	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C351	1-126-154-11	ELECT	47uF	20%	6.3V
C352	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C353	1-124-584-00	ELECT	100uF	20%	10V
C354	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C355	1-126-157-11	ELECT	10uF	20%	16V
C356	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C357	1-124-584-00	ELECT	100uF	20%	10V
C358	1-126-163-11	ELECT	4.7uF	20%	50V
C359	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C360	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C361	1-124-234-00	ELECT	22uF	20%	16V
C362	1-110-501-11	CERAMIC CHIP	0.33uF	10%	16V
C363	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C364	1-126-157-11	ELECT	10uF	20%	16V
C365	1-126-157-11	ELECT	10uF	20%	16V
C366	1-126-163-11	ELECT	4.7uF	20%	50V
C367	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C401	1-124-257-00	ELECT	2.2uF	20%	50V
C403	1-124-257-00	ELECT	2.2uF	20%	50V
C404	1-124-257-00	ELECT	2.2uF	20%	50V
C405	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C406	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C407	1-126-157-11	ELECT	10uF	20%	16V

Ref. No.	Part No.	Description			Remark
C408	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C409	1-126-159-11	ELECT	0.47uF	20%	50V
C410	1-126-157-11	ELECT	10uF	20%	16V
C416	1-124-234-00	ELECT	22uF	20%	16V
C420	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C421	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C422	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C430	1-126-157-11	ELECT	10uF	20%	16V
C431	1-115-175-11	ELECT	100uF	20%	16V
C432	1-126-157-11	ELECT	10uF	20%	16V
C433	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C440	1-126-157-11	ELECT	10uF	20%	16V
C441	1-115-175-11	ELECT	100uF	20%	16V
C442	1-126-157-11	ELECT	10uF	20%	16V
C443	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C461	1-124-234-00	ELECT	22uF	20%	16V
C462	1-110-501-11	CERAMIC CHIP	0.33uF	10%	16V
C463	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C464	1-126-157-11	ELECT	10uF	20%	16V
C465	1-126-157-11	ELECT	10uF	20%	16V
C466	1-126-163-11	ELECT	4.7uF	20%	50V
C467	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C500	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C501	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C503	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C504	1-125-701-11	DOUBLE LAYERS	0.047F		5.5V
C505	1-124-584-00	ELECT	100uF	20%	10V
C506	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C507	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C510	1-126-157-11	ELECT	10uF	20%	16V
C511	1-124-234-00	ELECT	22uF	20%	16V
C513	1-126-157-11	ELECT	10uF	20%	16V
C514	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C515	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C516	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C517	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C518	1-126-157-11	ELECT	10uF	20%	16V
C519	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C520	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C521	1-164-346-11	CERAMIC CHIP	1uF		16V
C530	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C531	1-124-584-00	ELECT	100uF	20%	10V
C532	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C550	1-126-157-11	ELECT	10uF	20%	16V
C601	1-126-157-11	ELECT	10uF	20%	16V
C602	1-126-154-11	ELECT	47uF	20%	6.3V
C603	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C604	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C605	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C606	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C607	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C608	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C609	1-124-229-00	ELECT	33uF	20%	10V

MAIN

Ref. No.	Part No.	Description			Remark
C610	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C611	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C612	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C613	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C614	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C615	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C650	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C651	1-126-157-11	ELECT	10uF	20%	16V
C701	1-111-233-11	ELECT	5600uF	20%	16V
C702	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C703	1-115-334-11	FILM	0.47uF	5%	50V
C704	1-124-589-11	ELECT	47uF	20%	16V
C705	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C706	1-136-227-11	MYLAR	0.001uF	5%	50V
C707	1-136-227-11	MYLAR	0.001uF	5%	50V
C708	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C709	1-115-326-11	FILM	0.1uF	5%	50V
C710	1-126-163-11	ELECT	4.7uF	20%	50V
C711	1-126-933-11	ELECT	100uF	20%	16V
C712	1-126-301-11	ELECT	1uF	20%	50V
C713	1-126-157-11	ELECT	10uF	20%	16V
C714	1-126-163-11	ELECT	4.7uF	20%	50V
C715	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C720	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C740	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C750	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C760	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C770	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C782	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C783	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C784	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C785	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C786	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C787	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C788	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C789	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
* CN201	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P			
CN250	1-766-260-11	CONNECTOR, FFC/FPC (ZIF) 7P			
CN500	1-770-411-11	CONNECTOR, BOARD TO BOARD 20P			
CN551	1-564-510-11	PLUG, CONNECTOR 7P			
CN600	1-580-907-31	PLUG, CONNECTOR 8P (BUS CONTROL IN)			
CN700	1-774-701-11	PIN, CONNECTOR 16P			
		< JACK >			
CN780	1-774-699-12	JACK, PIN 4P (BUS AUDIO IN, LINE OUT REAR)			
CN781	1-774-699-12	JACK, PIN 4P (LINE OUT FRONT, SUB OUT)			
		< DISCHARGE GAP >			
CP10	1-519-504-11	GAP, DISCHARGE			

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D10	8-719-040-04	DIODE MA721WK-(TX)	
D11	8-719-422-49	DIODE MA8056-L	
D12	8-719-422-97	DIODE MA8091-M	
D50	8-719-422-16	DIODE MA8039-L-TX	
D200	8-719-040-04	DIODE MA721WK-(TX)	
D201	8-719-200-82	DIODE 11ES2	
D202	8-719-422-97	DIODE MA8091-M	
D350	8-719-422-16	DIODE MA8039-L-TX	
D351	8-719-422-16	DIODE MA8039-L-TX	
D501	8-719-423-23	DIODE MA8110-M	
D502	8-719-423-23	DIODE MA8110-M	
D503	8-719-423-32	DIODE MA8120-M	
D504	8-719-423-32	DIODE MA8120-M	
D506	8-719-400-20	DIODE MA152WA	
D507	8-719-404-49	DIODE MA111	
D508	8-719-422-64	DIODE MA8062-M	
D509	8-719-422-64	DIODE MA8062-M	
D510	8-719-404-49	DIODE MA111	
D512	8-719-422-64	DIODE MA8062-M	
D513	8-719-422-64	DIODE MA8062-M	
D514	8-719-422-64	DIODE MA8062-M	
D515	8-719-422-64	DIODE MA8062-M	
D516	8-719-422-64	DIODE MA8062-M	
D517	8-719-422-64	DIODE MA8062-M	
D518	8-719-422-64	DIODE MA8062-M	
D519	8-719-422-64	DIODE MA8062-M	
D520	8-719-422-64	DIODE MA8062-M	
D521	8-719-422-64	DIODE MA8062-M	
D522	8-719-422-64	DIODE MA8062-M	
D523	8-719-404-49	DIODE MA111	
D524	8-719-040-04	DIODE MA721WK-(TX)	
D525	8-719-404-49	DIODE MA111	
D530	8-719-067-56	DIODE MA112-TX	
D532	8-719-067-56	DIODE MA112-TX	
D533	8-719-404-49	DIODE MA111	
D534	8-719-404-49	DIODE MA111	
D601	8-719-022-90	DIODE MA8160M	
D602	8-719-060-80	DIODE MA8180-L-TX	
D603	8-719-060-80	DIODE MA8180-L-TX	
D604	8-719-404-49	DIODE MA111	
D605	8-719-422-64	DIODE MA8062-M	
D606	8-719-017-62	DIODE MA8068-L-TX	
D608	8-719-033-43	DIODE RB751H	
D701	8-719-313-73	DIODE SFPB-52	
D702	8-719-313-73	DIODE SFPB-52	
D703	8-719-313-73	DIODE SFPB-52	
D704	8-719-313-73	DIODE SFPB-52	
D705	8-719-313-73	DIODE SFPB-52	
D706	8-719-313-73	DIODE SFPB-52	
D707	8-719-313-73	DIODE SFPB-52	
D708	8-719-313-73	DIODE SFPB-52	

Ref. No.	Part No.	Description	Remark
D709	8-719-422-64	DIODE MA8062-M	
D710	8-719-049-38	DIODE 1N5404TU	
D711	8-719-404-49	DIODE MA111	
D712	8-719-200-82	DIODE 11ES2	
D713	8-719-422-76	DIODE MA8075-M	
D714	8-719-801-78	DIODE 1SS184	
D715	8-719-404-49	DIODE MA111	
D717	8-719-404-49	DIODE MA111	
D718	8-719-313-73	DIODE SFPB-52	
D719	8-719-313-73	DIODE SFPB-52	
		< IC LINK >	
F550	1-533-674-11	LINK, CHIP IC (ICP-S0.5) 0.5A	
		< FUSE >	
F701	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
		< FERRITE BEAD >	
FB100	1-414-233-21	INDUCTOR, FERRITE BEAD (C8100R)	
FB500	1-414-233-21	INDUCTOR, FERRITE BEAD	
FB600	1-414-233-21	INDUCTOR, FERRITE BEAD	
		< IC >	
IC10	8-759-448-85	IC BU2624FV-E2	
IC11	8-759-184-64	IC TC4W66FU (C8100R)	
IC50	8-759-711-82	IC NJM4580E	
IC51	8-759-242-66	IC TC4W66F (C8100R)	
IC100	8-759-374-66	IC MSM6688GS-2K (C8100R)	
IC101	8-759-448-87	IC MSM6684JSDR1 (C8100R)	
IC150	8-759-492-59	IC SAA6588T-118 (C8100R)	
IC201	8-759-823-87	IC LB1638M	
IC250	8-752-079-79	IC CXA2510AQ-T4	
IC301	8-752-078-67	IC CXA1946BQ-T6	
IC302	8-759-711-82	IC NJM4580E	
IC310	8-759-444-50	IC TDA8574(T)	
IC320	8-759-711-82	IC NJM4580E	
IC350	8-752-067-30	IC CXA1846N	
IC383	8-759-711-82	IC NJM4580E	
IC410	8-759-444-50	IC TDA8574(T)	
IC500	8-759-443-72	IC RH5VL43AA-T1	
IC501	8-759-495-76	IC RN5VD33AA-TL	
IC502	8-759-347-50	IC BA3918-V3	
IC503	8-759-540-27	IC TA78DL06AS	
IC600	8-759-531-90	IC MB90574PFV-G-115-BND (C8100R)	
IC600	8-759-531-91	IC MB90574PFV-G-116-BND (C8100)	
IC602	8-759-449-89	IC BA8270F-E2	
IC650	8-759-530-58	IC MSM6654A-519GS-KR1	
IC700	8-759-486-44	IC TDA7386	
		< CONNECTOR >	
* J10	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P	
		< JACK >	
J500	1-566-822-41	JACK (REMOTE IN)	
		< COIL >	
L10	1-414-146-31	INDUCTOR 2.2uH	
L11	1-414-146-31	INDUCTOR 2.2uH	
L12	1-410-204-31	INDUCTOR CHIP 10uH	
L13	1-410-204-31	INDUCTOR CHIP 10uH	
L14	1-410-999-11	INDUCTOR CHIP 3.3uH	
L100	1-410-204-31	INDUCTOR CHIP 10uH (C8100R)	
L150	1-410-204-31	INDUCTOR CHIP 10uH (C8100R)	
L500	1-410-513-11	INDUCTOR 22uH	
L550	1-414-712-21	INDUCTOR 1mH	
L650	1-410-204-31	INDUCTOR CHIP 10uH	
L700	1-416-712-11	COIL, CHOKE	
		< EARTH TERMINAL >	
* LUG1	1-537-738-21	TERMINAL, EARTH	
		< TRANSISTOR >	
Q10	8-729-920-85	TRANSISTOR 2SD1664-QR	
Q11	8-729-208-21	TRANSISTOR 2SC2712L-TE85L-T	
Q12	8-729-208-21	TRANSISTOR 2SC2712L-TE85L-T (C8100R)	
Q13	8-729-208-21	TRANSISTOR 2SC2712L-TE85L-T	
Q14	8-729-421-22	TRANSISTOR UN2211	
Q15	8-729-020-67	TRANSISTOR XN1A312-TX	
Q17	8-729-021-94	FET 2SK1657-T1B	
Q50	8-729-920-21	TRANSISTOR DTC314TKH04	
Q51	8-729-020-67	TRANSISTOR XN1A312-TX	
Q52	8-729-421-22	TRANSISTOR UN2211 (C8100R)	
Q53	8-729-421-22	TRANSISTOR UN2211 (C8100R)	
Q60	8-729-920-21	TRANSISTOR DTC314TKH04	
Q80	8-729-920-21	TRANSISTOR DTC314TKH04	
Q201	8-729-421-22	TRANSISTOR UN2211	
Q202	8-729-020-67	TRANSISTOR XN1A312-TX	
Q203	8-729-931-13	TRANSISTOR 2SD1858-P-TV2	
Q204	8-729-106-60	TRANSISTOR 2SB1115A	
Q250	8-729-421-22	TRANSISTOR UN2211	
Q330	8-729-420-68	TRANSISTOR 2SD1328-R-TX	
Q340	8-729-420-68	TRANSISTOR 2SD1328-R-TX	
Q360	8-729-920-21	TRANSISTOR DTC314TKH04	
Q361	8-729-920-21	TRANSISTOR DTC314TKH04	
Q362	8-729-920-21	TRANSISTOR DTC314TKH04	
Q430	8-729-420-68	TRANSISTOR 2SD1328-R-TX	
Q440	8-729-420-68	TRANSISTOR 2SD1328-R-TX	
Q460	8-729-920-21	TRANSISTOR DTC314TKH04	
Q461	8-729-920-21	TRANSISTOR DTC314TKH04	
Q462	8-729-920-21	TRANSISTOR DTC314TKH04	
Q501	8-729-020-67	TRANSISTOR XN1A312-TX	
Q502	8-729-020-67	TRANSISTOR XN1A312-TX	

MAIN

Ref. No.	Part No.	Description	Remark
Q503	8-729-424-59	TRANSISTOR UN2212	
Q504	8-729-931-13	TRANSISTOR 2SD1858-P-TV2	
Q505	8-729-020-67	TRANSISTOR XN1A312-TX	
Q506	8-729-931-13	TRANSISTOR 2SD1858-P-TV2	
Q507	8-729-020-67	TRANSISTOR XN1A312-TX	
Q508	8-729-216-22	TRANSISTOR 2SA1162-G	
Q509	8-729-208-21	TRANSISTOR 2SC2712L-TE85L-T	
Q510	8-729-015-74	TRANSISTOR UN5111	
Q511	8-729-015-74	TRANSISTOR UN5111	
Q512	8-729-208-21	TRANSISTOR 2SC2712L-TE85L-T	
Q550	8-729-019-03	TRANSISTOR 2SB1202FA-T-TL	
Q551	8-729-421-22	TRANSISTOR UN2211	
Q600	8-729-421-22	TRANSISTOR UN2211	
Q601	8-729-421-22	TRANSISTOR UN2211	
Q602	8-729-403-35	TRANSISTOR UN5113	
Q603	8-729-208-21	TRANSISTOR 2SC2712L-TE85L-T	
Q700	8-729-424-56	TRANSISTOR UN211L	
Q701	8-729-021-94	FET 2SK1657-T1B	
Q702	8-729-021-94	FET 2SK1657-T1B	
Q703	8-729-019-03	TRANSISTOR 2SB1202FA-T-TL	
Q704	8-729-421-22	TRANSISTOR UN2211	
Q705	8-729-208-21	TRANSISTOR 2SC2712L-TE85L-T	
		< RESISTOR >	
R9	1-216-049-11	RES,CHIP 1K 5%	1/10W
R10	1-216-049-11	RES,CHIP 1K 5%	1/10W
R11	1-216-037-00	METAL CHIP 330 5%	1/10W
R12	1-216-073-00	METAL CHIP 10K 5%	1/10W
R13	1-216-097-00	RES,CHIP 100K 5%	1/10W (C8100R)
R14	1-216-097-00	RES,CHIP 100K 5%	1/10W (C8100R)
R15	1-216-049-11	RES,CHIP 1K 5%	1/10W
R18	1-216-065-00	RES,CHIP 4.7K 5%	1/10W (C8100R)
R19	1-216-049-11	RES,CHIP 1K 5%	1/10W
R20	1-216-081-00	METAL CHIP 22K 5%	1/10W
R21	1-216-081-00	METAL CHIP 22K 5%	1/10W
R22	1-216-073-00	METAL CHIP 10K 5%	1/10W
R23	1-216-073-00	METAL CHIP 10K 5%	1/10W
R25	1-216-089-00	RES,CHIP 47K 5%	1/10W
R26	1-216-845-11	METAL CHIP 100K 5%	1/16W (C8100)
R27	1-216-845-11	METAL CHIP 100K 5%	1/16W (C8100)
R30	1-216-025-00	RES,CHIP 100 5%	1/10W
R32	1-216-073-00	METAL CHIP 10K 5%	1/10W
R33	1-216-089-00	RES,CHIP 47K 5%	1/10W (C8100R)
R34	1-216-075-00	METAL CHIP 12K 5%	1/10W (C8100)
R34	1-216-081-00	METAL CHIP 22K 5%	1/10W (C8100R)
R35	1-216-057-00	METAL CHIP 2.2K 5%	1/10W
R36	1-216-049-11	RES,CHIP 1K 5%	1/10W
R50	1-216-073-00	METAL CHIP 10K 5%	1/10W

Ref. No.	Part No.	Description	Remark
R51	1-216-081-00	METAL CHIP 22K 5%	1/10W
R52	1-216-045-00	METAL CHIP 680 5%	1/10W
R53	1-216-037-00	METAL CHIP 330 5%	1/10W
R54	1-216-089-00	RES,CHIP 47K 5%	1/10W (C8100R)
R55	1-216-073-00	METAL CHIP 10K 5%	1/10W (C8100R)
R56	1-216-057-00	METAL CHIP 2.2K 5%	1/10W (C8100R)
R57	1-216-001-00	METAL CHIP 10 5%	1/10W
R58	1-216-295-00	SHORT 0 (C8100)	
R60	1-216-081-00	METAL CHIP 22K 5%	1/10W
R61	1-216-089-00	RES,CHIP 47K 5%	1/10W
R62	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R63	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R64	1-216-073-00	METAL CHIP 10K 5%	1/10W
R65	1-216-071-00	METAL CHIP 8.2K 5%	1/10W (G)
R65	1-216-077-00	METAL CHIP 15K 5%	1/10W (EXCEPT G)
R80	1-216-081-00	METAL CHIP 22K 5%	1/10W
R81	1-216-089-00	RES,CHIP 47K 5%	1/10W
R82	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R83	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R84	1-216-073-00	METAL CHIP 10K 5%	1/10W
R85	1-216-071-00	METAL CHIP 8.2K 5%	1/10W (G)
R85	1-216-077-00	METAL CHIP 15K 5%	1/10W (EXCEPT G)
R100	1-216-097-00	RES,CHIP 100K 5%	1/10W (C8100R)
R101	1-216-849-11	METAL CHIP 220K 5%	1/16W (C8100R)
R102	1-216-809-11	METAL CHIP 100 5%	1/16W (C8100R)
R103	1-216-825-11	METAL CHIP 2.2K 5%	1/16W (AEP,UK)
R104	1-216-821-11	METAL CHIP 1K 5%	1/16W (C8100R)
R105	1-216-089-00	RES,CHIP 47K 5%	1/10W (C8100R)
R106	1-216-097-00	RES,CHIP 100K 5%	1/10W (C8100R)
R107	1-216-845-11	METAL CHIP 100K 5%	1/16W (C8100R)
R108	1-216-845-11	METAL CHIP 100K 5%	1/16W (C8100R)
R109	1-216-845-11	METAL CHIP 100K 5%	1/16W (C8100R)
R110	1-216-089-00	RES,CHIP 47K 5%	1/10W (C8100R)
R111	1-216-845-11	METAL CHIP 100K 5%	1/16W (C8100R)
R150	1-216-853-11	METAL CHIP 470K 5%	1/16W (C8100R)
R151	1-216-821-11	METAL CHIP 1K 5%	1/16W (C8100R)

Ref. No.	Part No.	Description			Remark
R152	1-216-067-00	METAL CHIP	5.6K	5%	1/10W (C8100R)
R154	1-216-817-11	METAL CHIP	470	5%	1/16W (C8100R)
R155	1-216-814-11	METAL CHIP	270	5%	1/16W (C8100R)
R156	1-216-814-11	METAL CHIP	270	5%	1/16W (C8100R)
R157	1-216-001-00	METAL CHIP	10	5%	1/10W (C8100R)
R158	1-216-001-00	METAL CHIP	10	5%	1/10W (C8100R)
R201	1-216-150-00	RES,CHIP	10	5%	1/8W
R202	1-216-150-00	RES,CHIP	10	5%	1/8W
R203	1-216-150-00	RES,CHIP	10	5%	1/8W
R204	1-216-150-00	RES,CHIP	10	5%	1/8W
R205	1-216-073-00	METAL CHIP	10K	5%	1/10W
R206	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R207	1-216-049-11	RES,CHIP	1K	5%	1/10W
R209	1-216-089-00	RES,CHIP	47K	5%	1/10W
R230	1-216-097-00	RES,CHIP	100K	5%	1/10W
R231	1-216-097-00	RES,CHIP	100K	5%	1/10W
R232	1-216-027-00	METAL CHIP	120	5%	1/10W
R233	1-216-109-00	METAL CHIP	330K	5%	1/10W
R234	1-216-079-00	METAL CHIP	18K	5%	1/10W
R235	1-216-075-00	METAL CHIP	12K	5%	1/10W
R240	1-216-097-00	RES,CHIP	100K	5%	1/10W
R241	1-216-097-00	RES,CHIP	100K	5%	1/10W
R242	1-216-027-00	METAL CHIP	120	5%	1/10W
R243	1-216-109-00	METAL CHIP	330K	5%	1/10W
R244	1-216-079-00	METAL CHIP	18K	5%	1/10W
R245	1-216-075-00	METAL CHIP	12K	5%	1/10W
R250	1-216-681-11	METAL CHIP	18K	0.5%	1/10W (EXCEPT G)
R250	1-218-722-11	METAL CHIP	18K	0.50%	1/16W (G)
R251	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R252	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R253	1-216-113-00	METAL CHIP	470K	5%	1/10W
R254	1-216-089-00	RES,CHIP	47K	5%	1/10W
R301	1-216-073-00	METAL CHIP	10K	5%	1/10W
R302	1-216-073-00	METAL CHIP	10K	5%	1/10W
R303	1-216-073-00	METAL CHIP	10K	5%	1/10W
R304	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R305	1-216-079-00	METAL CHIP	18K	5%	1/10W
R306	1-216-077-00	METAL CHIP	15K	5%	1/10W
R307	1-216-809-11	METAL CHIP	100	5%	1/16W
R320	1-216-073-00	METAL CHIP	10K	5%	1/10W
R321	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R330	1-216-049-11	RES,CHIP	1K	5%	1/10W
R331	1-216-082-00	RES,CHIP	24K	5%	1/10W
R332	1-216-086-00	RES,CHIP	36K	5%	1/10W
R333	1-216-033-00	METAL CHIP	220	5%	1/10W
R334	1-216-081-00	METAL CHIP	22K	5%	1/10W
R335	1-216-049-11	RES,CHIP	1K	5%	1/10W
R336	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R340	1-216-049-11	RES,CHIP	1K	5%	1/10W
R341	1-216-082-00	RES,CHIP	24K	5%	1/10W
R342	1-216-086-00	RES,CHIP	36K	5%	1/10W
R343	1-216-033-00	METAL CHIP	220	5%	1/10W
R344	1-216-081-00	METAL CHIP	22K	5%	1/10W
R345	1-216-049-11	RES,CHIP	1K	5%	1/10W
R346	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R350	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R351	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R352	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R353	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R355	1-216-001-00	METAL CHIP	10	5%	1/10W
R356	1-216-109-00	METAL CHIP	330K	5%	1/10W
R360	1-216-077-00	METAL CHIP	15K	5%	1/10W
R361	1-216-085-00	METAL CHIP	33K	5%	1/10W
R362	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R363	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R364	1-216-033-00	METAL CHIP	220	5%	1/10W
R365	1-216-081-00	METAL CHIP	22K	5%	1/10W
R366	1-216-073-00	METAL CHIP	10K	5%	1/10W
R367	1-216-073-00	METAL CHIP	10K	5%	1/10W
R368	1-216-097-00	RES,CHIP	100K	5%	1/10W
R369	1-216-097-00	RES,CHIP	100K	5%	1/10W
R401	1-216-073-00	METAL CHIP	10K	5%	1/10W
R402	1-216-073-00	METAL CHIP	10K	5%	1/10W
R403	1-216-073-00	METAL CHIP	10K	5%	1/10W
R404	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R405	1-216-079-00	METAL CHIP	18K	5%	1/10W
R406	1-216-077-00	METAL CHIP	15K	5%	1/10W
R407	1-216-025-00	RES,CHIP	100	5%	1/10W
R420	1-216-073-00	METAL CHIP	10K	5%	1/10W
R421	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R422	1-216-073-00	METAL CHIP	10K	5%	1/10W
R423	1-216-073-00	METAL CHIP	10K	5%	1/10W
R430	1-216-049-11	RES,CHIP	1K	5%	1/10W
R431	1-216-082-00	RES,CHIP	24K	5%	1/10W
R432	1-216-086-00	RES,CHIP	36K	5%	1/10W
R433	1-216-033-00	METAL CHIP	220	5%	1/10W
R434	1-216-081-00	METAL CHIP	22K	5%	1/10W
R435	1-216-049-11	RES,CHIP	1K	5%	1/10W
R436	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R440	1-216-049-11	RES,CHIP	1K	5%	1/10W
R441	1-216-082-00	RES,CHIP	24K	5%	1/10W
R442	1-216-086-00	RES,CHIP	36K	5%	1/10W
R443	1-216-033-00	METAL CHIP	220	5%	1/10W
R444	1-216-081-00	METAL CHIP	22K	5%	1/10W
R445	1-216-049-11	RES,CHIP	1K	5%	1/10W
R446	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R460	1-216-077-00	METAL CHIP	15K	5%	1/10W
R461	1-216-085-00	METAL CHIP	33K	5%	1/10W
R462	1-216-065-00	RES,CHIP	4.7K	5%	1/10W

MAIN

Ref. No.	Part No.	Description			Remark
R463	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R464	1-216-033-00	METAL CHIP	220	5%	1/10W
R465	1-216-081-00	METAL CHIP	22K	5%	1/10W
R466	1-216-073-00	METAL CHIP	10K	5%	1/10W
R467	1-216-073-00	METAL CHIP	10K	5%	1/10W
R468	1-216-097-00	RES,CHIP	100K	5%	1/10W
R469	1-216-097-00	RES,CHIP	100K	5%	1/10W
R500	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R501	1-216-845-11	METAL CHIP	100K	5%	1/16W
R502	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R503	1-216-073-00	METAL CHIP	10K	5%	1/10W
R504	1-216-049-11	RES,CHIP	1K	5%	1/10W
R505	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R506	1-216-073-00	METAL CHIP	10K	5%	1/10W
R507	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R508	1-216-097-00	RES,CHIP	100K	5%	1/10W
R509	1-216-097-00	RES,CHIP	100K	5%	1/10W
R510	1-216-097-00	RES,CHIP	100K	5%	1/10W
R511	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R512	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R514	1-216-089-00	RES,CHIP	47K	5%	1/10W
R515	1-216-073-00	METAL CHIP	10K	5%	1/10W
R516	1-216-097-00	RES,CHIP	100K	5%	1/10W
R517	1-216-097-00	RES,CHIP	100K	5%	1/10W
R518	1-216-025-00	RES,CHIP	100	5%	1/10W
R519	1-216-025-00	RES,CHIP	100	5%	1/10W
R520	1-216-049-11	RES,CHIP	1K	5%	1/10W
R530	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R531	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R532	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R533	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R550	1-216-089-00	RES,CHIP	47K	5%	1/10W
R551	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R600	1-216-295-00	SHORT	0		
R602	1-216-845-11	METAL CHIP	100K	5%	1/16W
R603	1-216-097-00	RES,CHIP	100K	5%	1/10W
R607	1-216-097-00	RES,CHIP	100K	5%	1/10W
R608	1-216-845-11	METAL CHIP	100K	5%	1/16W
R609	1-216-097-00	RES,CHIP	100K	5%	1/10W
R613	1-216-049-11	RES,CHIP	1K	5%	1/10W
R614	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R615	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R616	1-216-049-11	RES,CHIP	1K	5%	1/10W
R617	1-216-097-00	RES,CHIP	100K	5%	1/10W
R618	1-216-097-00	RES,CHIP	100K	5%	1/10W
R619	1-216-097-00	RES,CHIP	100K	5%	1/10W
R620	1-216-097-00	RES,CHIP	100K	5%	1/10W
R621	1-216-097-00	RES,CHIP	100K	5%	1/10W
R622	1-216-097-00	RES,CHIP	100K	5%	1/10W
R623	1-216-097-00	RES,CHIP	100K	5%	1/10W
R624	1-216-097-00	RES,CHIP	100K	5%	1/10W
R625	1-216-017-00	RES,CHIP	47	5%	1/10W
R626	1-216-206-00	RES,CHIP	2.2K	5%	1/8W
R627	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R628	1-216-025-00	RES,CHIP	100	5%	1/10W
R629	1-216-025-00	RES,CHIP	100	5%	1/10W
R630	1-216-089-00	RES,CHIP	47K	5%	1/10W
R631	1-216-049-11	RES,CHIP	1K	5%	1/10W
R632	1-216-815-11	METAL CHIP	330	5%	1/16W
R633	1-216-097-00	RES,CHIP	100K	5%	1/10W
R634	1-216-097-00	RES,CHIP	100K	5%	1/10W
R635	1-216-097-00	RES,CHIP	100K	5%	1/10W
R636	1-216-097-00	RES,CHIP	100K	5%	1/10W
R637	1-216-085-00	METAL CHIP	33K	5%	1/10W
R638	1-216-073-00	METAL CHIP	10K	5%	1/10W
R639	1-216-073-00	METAL CHIP	10K	5%	1/10W
R640	1-216-089-00	RES,CHIP	47K	5%	1/10W
R641	1-216-295-00	SHORT	0		
R651	1-216-097-00	RES,CHIP	100K	5%	1/10W
R652	1-216-845-11	METAL CHIP	100K	5%	1/16W
R655	1-216-864-11	METAL CHIP	0	5%	1/16W
R656	1-216-097-00	RES,CHIP	100K	5%	1/10W (C8100)
R657	1-216-864-11	METAL CHIP	0	5%	1/16W (C8100R)
R658	1-216-097-00	RES,CHIP	100K	5%	1/10W
R660	1-216-049-11	RES,CHIP	1K	5%	1/10W
R661	1-216-049-11	RES,CHIP	1K	5%	1/10W
R662	1-216-049-11	RES,CHIP	1K	5%	1/10W
R663	1-216-049-11	RES,CHIP	1K	5%	1/10W
R701	1-216-222-00	RES,CHIP	10K	5%	1/8W
R702	1-216-206-00	RES,CHIP	2.2K	5%	1/8W
R703	1-216-049-11	RES,CHIP	1K	5%	1/10W
R704	1-216-017-00	RES,CHIP	47	5%	1/10W
R705	1-216-073-00	METAL CHIP	10K	5%	1/10W
R706	1-216-089-00	RES,CHIP	47K	5%	1/10W
R707	1-216-073-00	METAL CHIP	10K	5%	1/10W
R708	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R709	1-216-295-00	SHORT	0		
R710	1-216-089-00	RES,CHIP	47K	5%	1/10W
R711	1-216-206-00	RES,CHIP	2.2K	5%	1/8W
R712	1-216-085-00	METAL CHIP	33K	5%	1/10W
R713	1-216-089-00	RES,CHIP	47K	5%	1/10W
R714	1-216-089-00	RES,CHIP	47K	5%	1/10W
R715	1-216-121-00	METAL CHIP	1M	5%	1/10W
R780	1-216-049-11	RES,CHIP	1K	5%	1/10W
R781	1-216-049-11	RES,CHIP	1K	5%	1/10W

< NETWORK RESISTOR >

RB100	1-236-412-11	NETWORK RESISTOR (CHIP)	1.0K (C8100R)
RB601	1-236-412-11	NETWORK RESISTOR (CHIP)	1.0K
RB602	1-236-412-11	NETWORK RESISTOR (CHIP)	1.0K

< VARIABLE RESISTOR >

RV10	1-238-095-11	RES, ADJ, CERMET	470K (C8100R)
RV230	1-238-090-11	RES, ADJ, CERMET	10K
RV240	1-238-090-11	RES, ADJ, CERMET	10K

Ref. No.	Part No.	Description			Remark
		< SWITCH >			
S600	1-571-478-11	SWITCH, SLIDE (POWER SELECT)			
S601	1-571-478-11	SWITCH, SLIDE (FREQUENCY SELECT) (C8100)			
SW500	1-762-108-31	SWITCH, PUSH (1 KEY) (NOSE DET)			
		< THERMISTOR (POSITIVE) >			
TH600	1-801-792-21	THERMISTOR, POSITIVE 2.2			
TH700	1-801-792-21	THERMISTOR, POSITIVE 2.2			
		< TUNER >			
TUX10	A-3282-045-A	TUNER UNIT (TUX-012(E))			
		< VIBRATOR >			
X10	1-577-126-51	VIBRATOR, CRYSTAL (7.2MHz)			
X100	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz) (C8100R)			
X150	1-760-556-31	VIBRATOR, CRYSTAL (4.332MHz) (C8100R)			
X600	1-767-833-21	VIBRATOR, CERAMIC (3.68MHz)			
X601	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
X650	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)			
**********					
*	1-669-656-11	SUB BOARD			
		**********			
		< CONNECTOR >			
CN800	1-779-170-11	SOCKET, CONNECTOR 20P			
CN801	1-779-169-11	SOCKET, CONNECTOR 18P			
CN802	1-778-330-21	PIN, CONNECTOR (PC BOARD) 2P			
		< DIODE >			
LED800	8-719-058-14	LED CL-220PG-C-TS (TAPE WINDOW)			
LED801	8-719-051-01	LED CL-170HR-CD-T (TIR) (C8100R)			
LED802	8-719-038-07	LED CL-190PG-CD-T (⏏)			
		< RESISTOR >			
R800	1-216-049-11	RES,CHIP	1K	5%	1/10W
R801	1-216-025-00	RES,CHIP	100	5%	1/10W
R802	1-216-025-00	RES,CHIP	100	5%	1/10W
R803	1-216-025-00	RES,CHIP	100	5%	1/10W
R804	1-216-025-00	RES,CHIP	100	5%	1/10W
R806	1-216-025-00	RES,CHIP	100	5%	1/10W
R807	1-216-025-00	RES,CHIP	100	5%	1/10W
R808	1-216-025-00	RES,CHIP	100	5%	1/10W
R809	1-216-025-00	RES,CHIP	100	5%	1/10W
		< SWITCH >			
SW800	1-572-921-11	SWITCH, KEY BOARD (RESET)			
SW801	1-771-027-11	SWITCH, KEY BOARD (WITH LED) (⏏)			
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Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
17	1-783-495-11	CORD (WITH CONNECTOR) (INVERTER)	
18	1-777-246-11	CORD (WITH CONNECTOR) (ANTENNA)	
23	1-776-207-71	CORD (WITH CONNECTOR) (POWER) (C8100)	
23	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER)	(C8100R)
F701	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
HP901	1-500-157-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-467-559-91	REMOTE COMMANDER (RM-X47) (C8100)	
	9-939-081-01	LID, BATTERY (for RM-X47) (C8100)	
	1-473-067-71	REMOTE COMMANDER (RM-X4S)	
	3-012-070-01	LABEL (SOUND) (2) (FOR RM-X4S)	
	3-862-253-11	MANUAL, INSTRUCTION (ENGLISH,SPANISH,	CHINESE) (C8100)
	3-862-253-21	MANUAL, INSTRUCTION (ENGLISH,SPANISH,	SWEDISH,PORTUGUESE) (AEP,UK)
	3-862-253-31	MANUAL, INSTRUCTION (FRENCH,GERMAN,	DUTCH,ITALIAN) (AEP)
	3-862-253-41	MANUAL, INSTRUCTION (GERMAN) (G)	
	3-862-255-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH,	SPANISH,CHINESE) (C8100)
	3-862-255-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH,	SPANISH,SWEDISH,PORTUGUESE) (AEP,UK)
	3-862-255-31	MANUAL, INSTRUCTION, INSTALL (FRENCH,	GERMAN,DUTCH,ITALIAN) (AEP,G)
	3-862-619-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH,	FRENCH,GERMAN,SPANISH,DUTCH,SWEDISH, ITALIAN,PORTUGUESE,CHINESE) (RM-X4S)
	X-3373-926-1	CASE ASSY (XR)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-621-772-30	SCREW +B 2X6	
#2	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#3	7-685-794-09	SCREW +PTT 2.6X10 (S)	
#4	7-621-255-15	SCREW +P 2X3	
#5	7-685-105-19	SCREW +P 2X8 TYPE2 NON-SLIT	
#6	7-624-104-04	STOP RING 2.0, TYPE -E	
#7	7-627-553-17	SCREW, PRECISION +P 2X2 TYPE 3	
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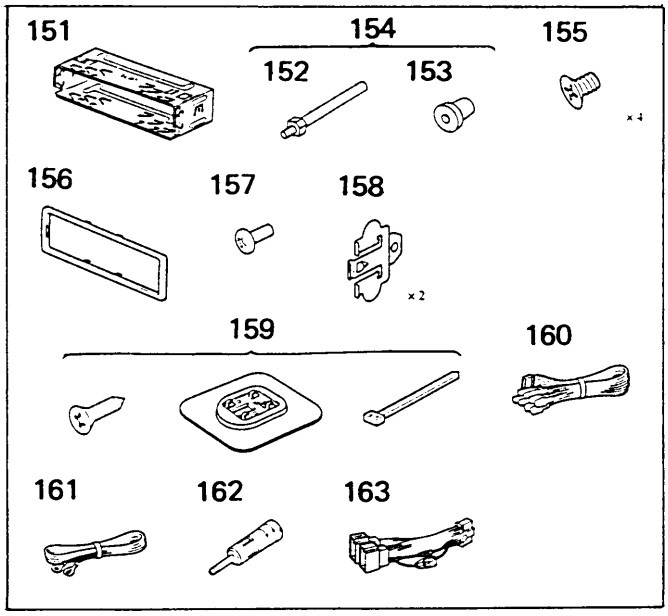
Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
151	3-009-613-21	FRAME	
152	3-386-828-01	SCREW, FITTING	
153	3-349-410-01	BUSHING	
154	X-3366-405-1	SCREW ASSY (EXP), FITTING	
155	3-934-325-01	SCREW, +K (5X8) TAPPING	
156	3-022-310-01	COLLAR	
157	7-682-560-04	SCREW +P 4X6	
158	3-934-787-01	SPRING, FITTING	
159	X-3373-432-1	BRACKET ASSY (RM-X4S)	
160	1-776-207-71	CORD (WITH CONNECTOR) (POWER) (C8100)	
161	1-775-543-11	CORD, GROUND	
162	1-465-459-21	ADAPTOR, ANTENNA (C8100R)	
163	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER)	(C8100R)